

09 JUN 1995

Ref: 95-F-1170

Roy E. Berkowitz, M.D.  
Medical Arts Building  
Hospital Drive  
Towanda, PA 18848

Dear Dr. Berkowitz:

This responds to your May 15, 1995, Freedom of Information Act (FOIA) request pertaining to a March 1995 document titled *Medical Readiness Strategic Plan 1995-2001*. We received your request on May 22, 1995. Our May 25, 1995, interim response refers.

The Office of the Assistant Secretary of Defense for Health Affairs has provided the enclosed document as responsive to your request. There are no chargeable fees, in this instance.

Sincerely,

~~SECRET~~

A. H. Passarella  
Director  
Freedom of Information  
and Security Review

Enclosure:  
As stated

Prepared by Kahn:5F1170L1gr:6/8/95:DFOI:X71160:gr\_\_pk\_\_yl\_\_wh\_\_

#760



Department of Defense

# **Medical Readiness Strategic Plan**

**1995 - 2001**

**March 1995**





HEALTH AFFAIRS

THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, D. C. 20301-1200

MAR 20 1995

MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS  
CHAIRMAN OF THE JOINT CHIEFS OF STAFF  
UNDER SECRETARY OF DEFENSE (PERSONNEL &  
READINESS)  
UNDER SECRETARY OF DEFENSE (COMPTROLLER)  
ASSISTANT SECRETARY OF DEFENSE (COMMAND,  
CONTROL, COMMUNICATIONS, & INTELLIGENCE)  
ASSISTANT SECRETARY OF DEFENSE (RESERVE  
AFFAIRS)  
DIRECTOR, PROGRAM ANALYSIS AND EVALUATION  
DIRECTOR, DEFENSE LOGISTICS AGENCY  
DIRECTOR, DEFENSE RESEARCH AND ENGINEERING

SUBJECT: Medical Readiness Strategic Plan 2001

The enclosed "**Medical Readiness Strategic Plan 2001**" (MRSP 2001) is the first comprehensive update of our medical readiness strategy since 1988. I am grateful to all those who have worked so diligently to ensure that the MRSP 2001 will be an effective tool for attaining and sustaining medical readiness into the 21st Century.

This new plan is not so much revolutionary in scope, as it is an evolutionary course correction that builds upon many programs and projects already in progress. It provides a baseline for addressing the most critical issues affecting medical readiness in each of the nine functional areas included in the plan thus far. The MRSP 2001 should be considered a "living document," which will be amended to capitalize on opportunities, technological advances, and improved business practices. We know that the myriad of missions and challenges facing the Department in the post-Cold War era will inevitably require periodic course corrections or updates of this strategy.

The next step in the medical readiness planning and execution process involves developing executable *implementation plans*. The "primary action offices" identified in Appendices A and B of the MRSP must prepare implementation plans that include, as a minimum, the following:

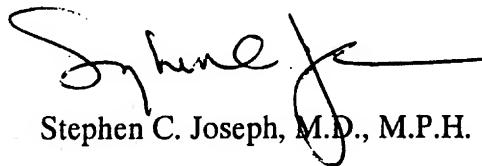
- (1) a Service, Command, or Agency-specific office/element responsible for completing each assigned task;
- (2) a timeline for accomplishment of each task; and
- (3) the budget status, and a POM projection for each task, if appropriate.



Your implementation plans should be returned to my point of contact within 90 days from the date of this memorandum. Upon receipt of your plans, Health Affairs will designate lead PAOs to coordinate task completion when more than one Service or agency is involved in a given action plan or task. (For example, if action plan # 1 assigns task "a" to the "Services," one Service may be designated to take the lead for coordinating completion of that task.)

The first medical readiness status briefings will take place approximately 120 days from the date of this memorandum. Additional guidance concerning the readiness briefings will be provided at a later date.

The Deputy Assistant Secretary of Defense for Health Services Operations and Readiness is coordinating the MRSP 2001 within Health Affairs. My POC for the implementation plans is LTC Steve Scanlon, Contingency Operations Policy Directorate, the Pentagon, Room 1C543, Telephone: (703) 697-8233, or DSN 227-8233.



Stephen C. Joseph, M.D., M.P.H.

Attachment  
As Stated

**Department of Defense**

**Medical Readiness Strategic Plan**

**1995 - 2001**

**March 20, 1995**

## **DEFINITION**

Medical Readiness encompasses the ability to mobilize, deploy and sustain field medical services and support for any operation requiring military services; to maintain and project the continuum of healthcare resources required to provide for the health of the force; and to operate in conjunction with beneficiary healthcare.

DoD approved definition, Nov 93

## MESSAGE FROM THE ASSISTANT SECRETARY OF DEFENSE (HEALTH AFFAIRS)

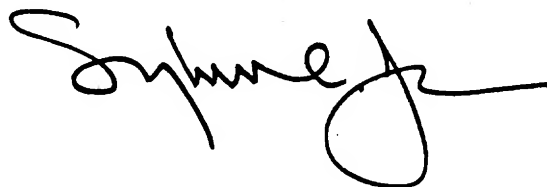
In 1988, the Department published the first Medical Readiness Strategic Plan (MRSP) in response to a Congressional mandate to "develop an integrated master plan for curing the ills of the wartime medical readiness system by the end of Fiscal Year 1992." The vision and objectives of that plan were right on target for the scenarios and the international security environment that prevailed at that time. Not long after the original MRSP was fielded, efforts to implement the plan were overcome by major world and national events which radically altered the global security picture, and ultimately reshaped our National Military Strategy.

Early in FY-94, Health Affairs re-energized the strategic planning and execution process, by forming a task force to update the 1988 MRSP for the post-Cold War environment. The task force assembled more than 130 military and civilian subject matter experts from the Joint Staff, the Office of the Secretary of Defense, the Military Departments, the Unified Commands, and various Defense agencies to address nine functions areas. These subject matter experts wrote chapters 2 through 10 of the plan, and developed 42 action plans addressing issues they believed were the most critical to medical readiness. The action plans were staffed throughout the Department of Defense between June and October 1994, and recommended changes were incorporated into this final "Medical Readiness Strategic Plan 2001" (MRSP 2001).

Enclosed is the result of this effort -- a new plan that retains the best of the original MRSP, while charting a course for military medicine into the twenty-first century. The MRSP 2001 is our road map for attaining and sustaining medical readiness. It applies to the Total Force -- all Services and components, and requires the cooperation of the "line" as well as the medical community in implementing the action plans.

Now comes the difficult part. We must turn these action plans into "implementation plans" for execution. And, we must program the resources necessary to procure the essential elements of readiness discussed throughout this plan. The primary action offices identified in Appendix A are responsible for preparing implementation plans with projected timelines for each assigned task. Many action plans build on existing programs and projects underway for some time. Other action plans identify requirements that are in their embryonic stage, and are currently unfunded. They must be properly developed to successfully compete for resources in the Department's Planning, Programming, and Budgeting System.

It is incumbent upon all participants in this endeavor to effectively prioritize their efforts to ensure that the objectives of the plan are achieved. By doing this, we will ensure that the Military Health Services System will continue to provide the best health care support to all beneficiaries under any and all conditions of peace and war.





# EXECUTIVE SUMMARY

## Background

The Department of Defense (DoD) published the first Medical Readiness Strategic Plan (MRSP) in February 1988 in response to directives outlined in the National Defense Authorization Act of 1987. Since then, several landmark events underscore the need to revise our strategies for enhancing and sustaining medical readiness:

- Radical changes in the international security environment beginning in 1989 signaled the end of the Cold War and the beginning of a New World Order. The implications of this shift in focus are apparent in many actions underway for some time: development of new military strategies; major armed forces reductions; and the revision of Service missions, roles and responsibilities.
- Operations Desert Shield and Desert Storm, 1990-1991, though successful, highlighted persistent medical support problems. Several reports by the DoD Inspector General (DoDIG), General Accounting Office (GAO) and other agencies called for dramatic changes and improvements.
- Congress and a new administration initiated sweeping changes and management initiatives to realign and streamline the military. The Bottom-Up Review, Defense Planning Guidance, Section 733 Study and aggressive health care reform initiatives mandated change to accommodate declining defense budgets and structure.

## Purpose

The purpose of the Medical Readiness Strategic Plan 2001 (MRSP-2001) is to provide DoD with an integrated, coordinated and synchronized plan for achieving and sustaining medical readiness through the year 2001 and beyond. It is the DoD guide book by which we will achieve a fully capable military health care system ready to support the continuum of military operations.

MRSP-2001 is a long range plan that supports execution of the full array of strategic planning documents from the National Security Strategy of the United States to the Defense Medical Programming Guidance and associated Service medical Program Objective Memorandums (POMs). We will use MRSP-2001 as the compass for articulating requirements and resources, and for developing policies and procedures. Medical readiness success will be measured against the objectives outlined in MRSP-2001.

## Organization

MRSP-2001 is organized in nine major functional areas. Each functional area and

associated sub-area is introduced with a concise narrative highlighting the background, current status and objectives developed by the MRSP-2001 functional area panels. A detailed action plan is provided for each functional area objective; action plans highlight the objectives, the tasks to be accomplished, and the primary action offices responsible for executing the objectives.

## **Methodology**

The Assistant Secretary of Defense for Health Affairs coordinated the development of the MRSP-2001 as a collaborative effort between all sectors of DoD. This included representatives from the Office of the Secretary of Defense, the Joint Staff, Unified Commands, the Military Services, and other Defense agencies. Nine joint panels, over 130 military and civilian personnel, convened to thoroughly review key defense guidance, studies, reports and lessons learned; formulate major strategic objectives; and produce detailed supporting action plans for implementation.

## **Readiness Oversight/Evaluation**

The Department intends to continuously monitor the status of DoD medical readiness. Aggressive development and implementation of an effective oversight/evaluation mechanism is fundamental to the success of the entire MRSP-2001. Chapter 10 of the plan outlines the actions we plan to pursue.

## **Functional Areas in Brief**

### ***PLANNING***

The Military medical departments must develop, enhance and sustain coordinated and synchronized policies, doctrine and training that facilitate medical planning, resourcing, and execution of joint and combined operations. Successful joint initiatives include the establishment of a functional medical annex in the operations plan and implementation of the Joint Medical Planner's Course. Renewed efforts must be made to develop joint medical doctrine which supports line commanders and the warfighting Commanders in Chief (CINCs). Modern automated planning tools are lacking along with trained and experienced medical planners. The Services must critically evaluate and define medical planner career specialties and development plans. Specific objectives include:

- Ensure true joint planning is the norm and is driven by integrated, forward-thinking doctrine.
- Provide medical planners with the tools they need to develop effective, executable plans.

- Ensure an inventory of qualified, interchangeable medical planners.

### ***REQUIREMENTS, CAPABILITIES, AND ASSESSMENT***

The Medical Planning Module (MPM) is the only standardized tool used to determine wartime health services requirements. The MPM also generates the vital data used for planning, programming and budgeting decisions. Major improvements are needed, including capabilities to accommodate multiple scenarios and force changes - and current, validated and integrated casualty rate figures. The Joint Staff development of the Medical Planning Execution System (MEPES) to replace the MPM must move forward rapidly and anticipate future planning module requirements. Specific objectives include:

- Establish planning factors for 2<sup>nd</sup> through 5<sup>th</sup> echelon medical facilities based on the Time, Task, Treater clinical database. Validate all MEPES planning factors annually.
- Develop a mechanism to assess requirements and capabilities for combatant commanders, Services and the Joint Staff.
- Develop a methodology appropriate for each Service to ensure a match of casualty rate development and application across the full range of operational situations.
- Include medical requirements in all wargaming activities; and develop interfaces between wargaming tools and existing and future medical models.
- Develop a method for linking real world patient load data with modern Patient Condition codes enabling planners to forecast medical workload and resource requirements.
- Re-engineer the POM development process to allow time for appropriate CINC input, and time to calculate and validate medical requirements in support of the Illustrative Planning Scenarios.

### ***COMMAND, CONTROL, COMMUNICATIONS, COMPUTERS AND INFORMATION MANAGEMENT***

The military medical community must redouble its effort to develop a standardized, integrated and seamless system of medical command and control within the Global Command and Control System (GCCS). As a minimum, we must develop and publish doctrine for medical support communications and information systems; enhance planning, exercising, modeling and simulation; and exploit employment of advanced information technology. We must define our integrated communications requirements, develop an acquisition strategy which accommodates advanced technology add-ons and provides us with reliable and continuous voice, text, data, visual and position location communications. Finally, we must move quickly into the future by developing a modern medical information system. This



includes development and deployment of an individually carried data device and fielding of the Theater Medical Information System. Specific objectives include:

- Ensure the medical structure has a robust, seamless, and assured communications capability within the global communications architecture.
- In accordance with the Command, Control, Communications, Computers, and Intelligence for the Warrior concept, consolidate medical command and control requirements into a single interoperable capability to be part of GCCS.
- Satisfy the validated requirement for an updatable, individually carried data storage device with read/write capability.
- Satisfy the validated requirement for a seamless medical information system serving contingency support and beneficiary care across all echelons.

### **LOGISTICS**

Medical logistics organizations, policies and procedures supporting joint medical operations must keep pace with new defense strategies and logistics demands. Modern business practices must be developed which exploit commercial logistics bases and just-in-time inventories. With the completion of the major procurement phase of Deployable Medical Systems (DEPMEDS), we must now focus on sustaining and modernizing our deployable medical equipment. The Single Integrated Medical Logistics Management systems must be enhanced with automated support systems linked by integrated communications. We must aggressively implement an interim standard medical logistics system while simultaneously working to develop the long term Defense Medical Logistics Standard Support system. Joint medical logistics doctrine must also be addressed. Specific objectives include:

- Develop and update acquisition and support plans that support the full spectrum of military operations.
- Ensure that DEPMEDS, other medical assemblages, medical sets, kits, and outfits and non-medical material are maintained, refurbished and modernized in a timely manner to provide quality medical care and capability to support operational requirements.
- Provide medical logistics information management systems and communications systems which allow the transmission and exchange of logistics data within a theater of operations and with the supporting base (Communications Zone or the Continental United States (CONUS)).
- Develop common baselines for computing medical materiel sustainment requirements

and reporting unit or platform medical materiel readiness. Integrate this information into joint medical planning processes.

### *MEDICAL EVACUATION*

Our medical evacuation systems must be comprehensively reviewed to ensure we have trained and ready resources capable of supporting the continuum of care. We must assess our total ground, sea and air evacuation requirements and maximize the potential for each platform to support military operations. It is imperative for the Army to evaluate requirements and modernize its evacuation capabilities in order to meet its assigned battlefield missions. The Air Force must review the roles and missions, sustainment, modernization and reporting capabilities of its intra- and inter-theater evacuation aircraft. We must develop the ability to access Aeromedical Evacuation Civil Reserve Air Fleet sooner in the mobilization process to complement an overcommitted C-141 fleet. Our final product should be seamless and fully integrated, with appropriate command and control mechanisms that facilitate proper allocation and employment of modern evacuation platforms. Specific objectives include:

- Ensure timely availability of required personnel or units to accomplish the medical evacuation mission.
- Define patient evacuation requirements and develop enhanced medical evacuation capability that accommodates shorter theater evacuation policies by all Services.
- Develop CONUS casualty reception and distribution plans as well as intra-regional execution methodologies.
- Develop an integrated capability for medical evacuation that includes rotary-wing, fixed-wing, land and sea assets.
- Develop joint doctrine for the joint use of evacuation assets to include dedicated air ambulance support to Marine Corps contingency operations, and establishment of a Theater Patient Movement Requirements Center.
- Develop joint doctrine for the entire medical evacuation system to ensure all levels of evacuation are interoperable, and integrated into a seamless system and provide in-transit visibility of patients.
- Develop and execute a program to procure and/or modernize evacuation platforms.
- Ensure Patient Movement Items (PMI) are standard and interoperable among the Services, and are operable aboard evacuation aircraft by developing a system to certify, track, maintain and recover PMI.

- Identify integrated patient transportation command and control systems to ensure seamless patient transfer and maintain visibility throughout patient movement.

### ***MANPOWER AND PERSONNEL***

Our manpower systems and procedures must focus on meeting wartime requirements within assigned end strengths. We must carefully manage the appropriate mix of Active and Reserve Component medical forces; enhance the assignment, training and sustainment of health care personnel; and rightsize our Service Graduate Medical Education (GME) programs. Finally, we must continue to recruit and retain qualified health care personnel. Specific objectives include:

- Recruit and retain qualified Active and Reserve medical personnel to meet military medical requirements by specialty and grade.
- Ensure a consistent set of medical deployability criteria is used by all Services.
- Develop a program to ensure that all newly accessed Active and Reserve medical personnel attend required entry level military training within twelve months of accession.
- Optimize Service GME programs, ensuring they satisfy physician requirements by specialties and numbers.
- Validate requirements and establish early authority to mobilize Reserve component medical forces to integrate with active duty immediate deployment forces.

### ***TRAINING***

We need to establish common medical training guidelines, policies, and standards which promote medical readiness. The Joint Medical Readiness Education Council must continue their efforts to define medical readiness training standards, joint training requirements and resources required; and reassess the missions, roles and responsibilities of the Joint Medical Readiness Training Center. Simultaneously, our Health Care Committee of the Inter-Service Training Review Organization must aggressively pursue a review of all functional medical technical and operations training as directed by the Chairman, Joint Chiefs of Staff. Where possible, we must combine training to reduce costs. World wide, medical participation in joint and combined exercises has decreased; this trend must be turned around and incorporate employment of Active and Reserve assets. Specific objectives include:

- Establish a DoD system to provide and monitor medical readiness training.
- Develop a mechanism to ensure DoD-wide minimum competency levels for unique specialty areas.

- Maximize DoD-wide utilization of field medical training sites to enhance interoperability and shared training.
- Increase opportunities for Active and Reserve medical interface in Service specific, and Joint/Combined exercises.

### ***BLOOD***

We must maintain a strong, viable Armed Services Blood Program capable of providing modern blood products to worldwide customers, supporting the full spectrum of military operations. We must continue to meet Food and Drug Administration blood regulations and guidelines; coupled with the deployment of the Defense Blood Standard System, we will greatly facilitate standardization and quality assurance in the delivery of safe blood products and services to our customers. We must complete development and publication of Joint Publication 4-02.1 to ensure our joint blood doctrine is employed. The frozen blood system distribution plan must be expeditiously completed to ensure designated combatant commands can meet their wartime blood requirements. Finally, we must exploit and incorporate new blood technologies as they become available to improve the efficiency and safety of the military blood program. Specific objectives include:

- Maintain an Armed Services Blood Program which provides quality blood products and services to meet all DoD requirements.
- Develop joint blood doctrine to meet combatant command requirements.
- Complete the worldwide fielding of frozen blood to designated Unified Commands, and develop improvements in frozen blood technology.
- Develop and maintain peacetime blood operations which support the continuum of military operations.
- Comprehensively update wartime blood requirements, and develop programs, doctrine, policies and procedures to ensure implementation.
- Monitor and assist blood and blood substitute research and development; incorporate new technologies as they become available.

### ***READINESS OVERSIGHT AND EVALUATION***

Our first priority will be to establish a viable oversight/evaluation mechanism to ensure successful implementation of MRSP-2001 objectives. We envision forming a joint Defense Medical Readiness Council (DMRC), composed of Department and Service representatives.

The DMRC will address all medical readiness issues and aggressively develop and monitor implementation of the MRSP-2001. The specific objective is:

- Establish DoD process to monitor medical readiness. □

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# INTRODUCTION

## **Purpose**

The Department of Defense (DoD) published the first Medical Readiness Strategic Plan in February 1988 in response to a Congressional directive in the National Defense Authorization Act of 1987. Since that time, world and national events have underscored the need to revise our strategies for enhancing and sustaining medical readiness.

This Medical Readiness Strategic Plan 2001 (abbreviated MRSP-2001) provides DoD with an updated, integrated, coordinated, and synchronized plan for attaining and sustaining medical readiness through the year 2001 and beyond. It is the guidebook for achieving the medical capabilities required to support the continuum of military operations as outlined in Defense Planning Guidance for Fiscal Years 1996 - 2001.

MRSP-2001 supports execution of the full array of strategic planning documents from the National Security Strategy of the United States to the Defense Medical Programming Guidance (DMPG) and associated Service medical Program Objective Memorandums (POMs). It will be the compass for articulating medical readiness requirements and resources, and for developing policies and procedures.

## **Methodology**

The Assistant Secretary of Defense for Health Affairs (ASD(HA)) coordinated the development of the MRSP-2001 as a collaborative effort between all sectors of DoD. This included representatives from the Office of the Secretary of Defense (OSD), the Joint Staff, Unified Commands, the Military Services, and other Defense agencies. Nine joint panels, over 130 military and civilian personnel, convened to thoroughly review key defense guidance, studies, reports and lessons learned; formulate major strategic objectives; and produce detailed supporting action plans for implementation.

This strategic plan is intended to be a "living document," which will be updated and adjusted to respond to changes in a highly dynamic environment. When a given readiness objective is achieved, the supporting action plan will be removed; and new functional areas, objectives, and action plans will be added as opportunities to improve medical readiness are identified.

## **Organization**

Chapter 1 of the plan presents a medical readiness "vision" for the period 1995 - 2001. It is followed by nine chapters addressing separate functional areas, which include a baseline status of the subject area along with specific readiness objectives. Our success in attaining and maintaining medical readiness will be measured against these objectives.



Action plans for achieving the readiness objectives identified in chapters 2 thru 10 are contained in Appendix A. These 42 action plans were developed by the subject matter experts mentioned earlier, and form the nucleus of this strategic plan. Each action plan specifies the general tasks to be accomplished and the Primary Action Offices (PAOs) responsible for coordinating their completion.

Timelines for completion of tasks are projected by the PAOs when they prepare their formal *implementation plans*. These implementation plans are an integral part of the overall process, but are not published as part of this document.

PAO implementation plans identify in greater detail the steps (i.e., sub-tasks) necessary to complete the general tasks outlined in the action plans at Appendix A. They specify the Service-specific or organizational element/office responsible for a given sub-task, along with the timetable for completing the action.

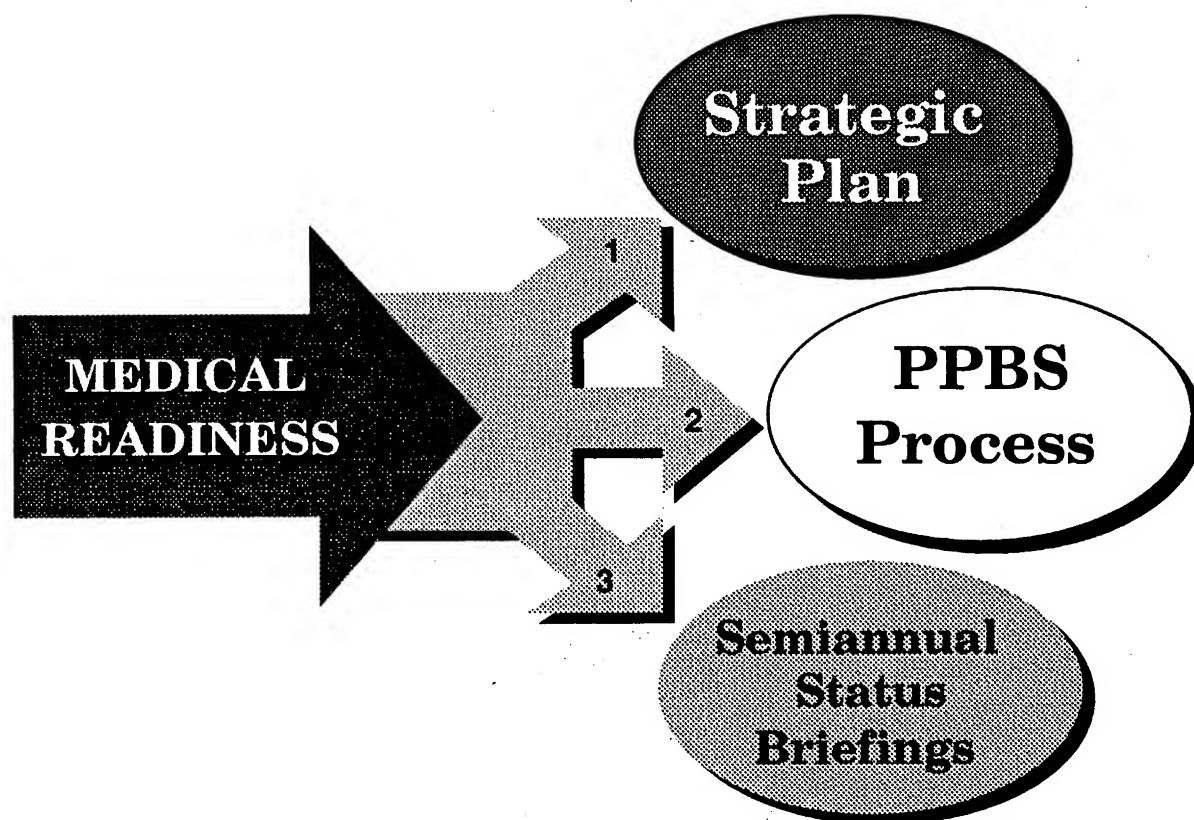


Figure 1

## Readiness Oversight/Evaluation

The strategic plan is only one element of a three prong approach to achieving medical readiness (see Figure 1). Two other critical elements in the process are -

- **The Planning, Programming, and Budgeting System (PPBS) process:** Defense Medical Program Guidance specifically addresses medical readiness priorities within the Defense Health Program (DHP). New POM formats were devised for the POM Preparation Instructions (PPI) to gain visibility of those aspects of medical readiness addressed in the Services' POMs.
- **Readiness Status Briefings:** Once a joint readiness oversight body is formed, regular medical readiness status briefings will be scheduled at least semiannually, to chart progress toward achieving the medical readiness objectives.

Together, these three elements will establish a cyclic and perpetual process to identify requirements, develop policy, provide resources and monitor success of medical readiness programs and initiatives. □



## Chapter 1

# READINESS VISION 1995 - 2001

### The Mission

The military medical departments exist to support their combat forces in war, and, in peacetime, to maintain and sustain the well being of the fighting forces in preparation to go to war. The medical departments must be prepared to respond effectively and rapidly to the entire spectrum of potential military operations - from multiple major regional contingencies to Operations Other Than War (OOTW).

Preparation for wartime/contingency operations includes the identification of the medical threat, development of the medical organizations and systems to support potential combat scenarios, training medical units and personnel for their wartime roles, training non-medical personnel in medical subjects, medical research to discover new techniques and materiel to conserve the fighting strength, and providing both preventive and restorative health care to the military force.

In peacetime, the medical systems and organizations for wartime support, when not employed in preparation and training for the wartime role, are used to provide health care to other eligible beneficiaries.

### The Environment

Recent changes in the foreign and domestic policy of the United States have significant impact on the Defense medical community. These policies, coupled with budget and personnel reductions in the armed forces, challenge the Defense Department's ability to successfully accomplish the primary military medical mission:

***"to provide and maintain readiness to provide medical services and support to the armed forces during military operations."***

The new international security environment was shaped in part by the collapse of communism within the former Soviet Union and the use of a multi-national coalition force in Operation Desert Storm. The conclusion of the Cold War has caused a refocusing of our national strategy from a major global encounter to one of multiple regional conflicts. In the first major regional conflict of the post-Cold War era, Southwest Asia, the U.S. embraced a multi-national coalition force to successfully liberate Kuwait. The global environment of multiple regional threats dictates a change in the U.S.'s approach to resolve international conflicts which threaten our national security interests or our allies.

As an adjunct to our national security interests, the U.S. envisions humanitarian

assistance as an additional mission for the Armed Forces. Domestically, there is great uncertainty about new roles and missions the military may be assigned. The use of military resources within the United States for nonmilitary missions (e.g., Civil-Military Cooperative Action projects) is currently being tested and encouraged. The pursuit of these initiatives clearly marks a departure from our past requirements.

The call for a greatly reduced standing military force challenges the Department to provide national security at a reduced cost. As the nation seeks a greater benefit to cost ratio from military programs and support requirements, domestic programs may be undertaken as resources permit. However, medical readiness/capability must be protected to ensure our ability to rapidly respond to our primary mission requirements. During these uncertain times, the medical community must become even more cost conscious and innovative in preparing for the future.

Given these new conditions, the DoD medical community must assess, validate, prioritize, and revise policies, and program resources over the next program cycle extending into the next century. This plan lays the foundation for the future, and its success or failure will have lasting impact on military medicine.

## **Required Capabilities**

The medical capability necessary to support the continuum of military operations depicted in current Defense Planning Guidance, FY 1996 - 2001 requires -

- Military health care providers who are physically fit to deploy, and who are highly trained and proficient in the art of military medicine.
- Military health care providers trained with the supplies and equipment of their respective deployable platforms and units.
- Military (medical and non-medical) leaders at all levels who are well founded in military medical doctrine, tactics, techniques and procedures.
- Mission capable medical units and individuals who are ready for rapid mobilization and strategic deployment to sustain medical support for any mission within the operational spectrum.
- Units with increased flexibility and mobility which can be tailored for a variety of potential missions.
- A medical evacuation system which incorporates multiple evacuation platforms into a seamless intra- and inter-theater patient evacuation system; and which employs interoperable

patient movement items that function on any evacuation platform.

- Medical information management systems that accommodate command and control, medical logistics, and patient accountability, and that are integrated into a responsive and unencumbered architecture.
- Medical units/platforms and evacuation vehicles equipped to communicate by voice and other electronic means with supporting and supported forces, and across Service lines.
- Senior leaders who recognize advancements in medical practice and technologies, through training and acquisition initiatives, which sustain our ability to provide medical care during any contingency and under the most austere conditions.

## **Developing a Doctrine**

Medical doctrine exists to provide a framework to develop and refine tactics, techniques and procedures for effective medical support extending from the most forward American service member at risk through the Continental United States (CONUS) base. Within the theater of operations, medical tactics, techniques and procedures are necessarily Service specific, but are founded on a shared concept of the medical threat and common clinical policies and protocols in the theater of war.

Recent experience in U.S. foreign policy necessitates revisiting the organization of medical support to accommodate peacemaking, peacekeeping and humanitarian assistance missions, when assigned by National Command Authority. Medical units must be designed with organizational flexibility and resourced appropriately. Unit commanders must be well versed in their unit's capability, adaptability and needs so they may tailor the organization to meet specific missions.

A review of non-medical resources required to support and sustain medical operations and how to acquire and integrate them into the force formally in doctrine is also needed.

CONUS medical facilities and equipment must also be designed primarily to support the wartime medical readiness mission.

## **Determining Force Composition**

The composition of the total military medical force - Active and Reserve components - is determined primarily by the mission and population of the military force it must support. Included are the medical forces deployed in the theater of operations, other overseas military medical requirements, the CONUS military medical training base, and the military medical force needed to provide preventive and restorative care in CONUS to the mobilizing

population and to patients evacuated from OCONUS. Only those patients who can be returned to duty within a reasonable period of time will be admitted to CONUS military facilities. Others will be admitted and receive care in Department of Veteran Affairs (DVA) hospitals and designated civilian hospitals participating in the National Disaster Medical System (NDMS).

## **Sizing the Force**

The Active Component (AC) will provide the immediate medical response capability. However, the major portion of the total required military medical force will be in the Reserve Component. The AC will be sized to provide immediate contingency response until mobilization and deployment of the Reserve Components (RC) can satisfy mission needs. After consideration of the force required to prepare for war, the size of the Active Component is adjusted for any additional requirement to provide health care to the military force and family members forward deployed. Finally, additional adjustments to the size of the Active Component can be considered if the Military Health Service System (MHSS) can provide more cost effective health care to beneficiaries. The priority for growth in active and reserve authorizations will be the critical wartime skills necessary to support the medical readiness component of the health care mission.

## **Training Requirements**

Medical training in preparation for war is provided to both medical and non-medical personnel. Military health care providers of all ranks must understand the system for combat medical support. Medical vocational training (i.e., basic first aid) is provided for those who enter the service without medical skills to prepare them to function as a part of the combat medical support system. Regardless of component affiliation (active or reserve), those who enter the service with graduate degrees in a medical discipline will receive initial and sustainment training to prepare them for their wartime role and to enhance their combat medical skills. Health care providers must be assigned to - and train with - their wartime unit. This approach will foster a greater sense of mission, unit cohesion, and will familiarize providers with the equipment and supplies to be used upon deployment.

Mobilization and deployability status (including physical qualification for deployment) will be maintained through an automated credentialing system that interfaces with other automated systems which align health care providers with wartime requirements by position and specialty.

Non-medical personnel must receive training in disease avoidance through basic field sanitation, techniques of self or buddy aid on the battlefield, leadership concepts (i.e., water discipline and management of combat stress), and familiarization with the combat medical system.

The use of modern technological advances such as computer simulations and virtual reality have potential to provide realistic training in battlefield techniques and procedures, and should be pursued to enhance medical readiness training.

## **Medical Planning Considerations**

Medical annexes to the theater Operation Plans (OPLANs) are prepared by the theater surgeon and are reviewed by the Joint Staff, Services and Defense agencies. In the theater, maximum use is made of the joint sharing of resources and of host nation support where appropriate. In planning, care is taken to avoid the assumption of dependence on such support arrangements for elements which are critical to mission accomplishment.

Plans should be developed so that each theater has a single medical logistics system in peace and war, with emphasis on developing and operating a joint integrated multi-national system. Use of air lines of communications will be maximized. Medical equipment, supplies, and blood will be stored in theater in quantities sufficient to support contingency requirements until CONUS resupply can be accomplished.

The deployability and mobility of hospitals equipped with Deployable Medical Systems (DEPMEDS) will be improved by reducing their weight and cube without degrading their combat casualty care capabilities. Hospital sets will be stored in forward deployed sites or pre-positioned vessels either in unit configuration prepared for immediate operation upon arrival of medical personnel, or packed for long-term storage. Periodic updates of inventories, locations, and mobilization status of all medical units will be maintained.

Contracting for contingency support from civilian distribution channels to replace/rotate dated and deteriorative medical supplies will be established. The overhead cost of readiness due to periodic outdateding of these items can be reduced by better management. Shelf life is extended when testing demonstrates that it can be done safely. Older stocks are rotated with fresh stocks from the fixed facilities in the health care system to the maximum extent. With the cooperation of industry, their customer consumption base can be used to rotate stock with expiration dates by holding inventory for us, selling it to the public prior to expiration, and replacing it with fresh stock.

## **Keeping Up with Technology**

Modernization and sustainment programs are essential to providing quality care on the battlefield. The DEPMEDS program was the first major modernization of combat medical equipment since the Vietnam era. The military must take advantage of the gains in medical technology. These new advances must be quickly identified, budgeted, standardized, modified if needed, to be lightweight and durable, acquired and distributed throughout the force. Technologies with combat medicine implications are critical to treating and sustaining the



force in the most dangerous and austere environments. Actual training with DEPMEDS equipment and supplies will help ensure modernization of all units.

### **Integrating Communications and Information Management Systems**

Dedicated communication links within the theater, and between the theater and CONUS, permit a common medical management information/logistics system to extend from the most forward health care provider in theater through each level of care to the military, DVA or NDMS receiving hospital in CONUS. This system should permit medical personnel to communicate across Service boundaries and outside pure medical channels.

A completely automated information system eliminates the use of paper medical records and materiel requisitions; ensures patient accountability in the chain of evacuation and across the entire continuum of care; and speeds resupply. There is a need to design an automated information system architecture to accommodate the multiple functions of medical management/logistics in contingency and combat operations.

Satellite and tele-imaging technology allows audio-visual real time consultation with medical specialists in the military, national, and international communities. "Telemedicine" has the potential to reduce medical resource requirements, while improving the quality of health care to casualties in remote theaters.

### **Improving Medical Evacuation**

Theaters will have an integrated system for medical evacuation fully utilizing land, air and sea transportation assets. Improvements in forward tactical casualty evacuation land and air platforms are dictated by the evolving technology, enhancements in the military health service support system, and the war fighter's mission, maneuver requirements, time, distance and terrain. These factors will be considered in establishing the most cost and mission effective ambulatory and litter load capability.

Sufficient dedicated patient evacuation aircraft, augmented by retrograde lift, must be positioned or available in theater to conduct the aeromedical evacuation (AE) mission, until reinforced from CONUS. Optimally, intertheater medical evacuation will be carried out using dedicated aircraft and flight crews from the U.S. Civilian Reserve Air Fleet (CRAF).

By law, the Stage II segment of CRAF can be activated prior to mobilization for use in other contingency situations or disaster relief. These dedicated medical aircraft will be used to carry medical supplies (class VIII) to the theater.

Redistribution of patients within CONUS will be accomplished by available medical aircraft supported by CRAF.

## Changing Roles

United States Atlantic Command (USACOM), a joint command, with a contingency plan under development for integrated CONUS medical operations, has the mission to provide planning, coordination, and integration of all CONUS military medical activities in wartime, to include expansion of military medical training base, provision of preventive/restorative care to the mobilizing population, and provision of medical care to military patients returning from OCONUS who are to be returned to active duty in a reasonable period of time.

Theater requirements will always have a higher priority for resources. The joint command coordinates with DVA and NDMS hospitals to ensure appropriate care is provided military patients not being returned to active duty, who are being cared for in non-military facilities. In peacetime, USACOM will coordinate and plan for CONUS mobilization. □



## **Chapter 2**

# **PLANNING**

The DoD Reorganization Act of 1986 (Goldwater-Nichols) has increased the joint mindset of the Military Departments and strengthened the roles of the Unified Commanders. All functional areas are emphasizing joint planning and joint use of assets.

This trend will only accelerate during the current drawdown of resources by all of the Services. While the Military Departments will retain their Service specific tasks, they must closely plan joint use of assets to ensure accomplishment of the assigned mission. This is especially true for the multinational operations the Department is undertaking worldwide.

## **OPLAN Development**

### **BACKGROUND**

Joint medical planning has progressed considerably from the rudimentary efforts of the early and mid-1980's. There is now a medical annex in each operational plan which is compiled in the same manner as any other annex, and goes through the same scrutiny as part of the sustainability analysis process.

The medical annex is included within the operation plan and is forwarded to the Joint Staff for review and approval. The approved OPLAN is then the basis for the supporting plans prepared by the Service components and supporting Unified Commanders.

During the planning cycle, all joint medical requirements are identified and sourced by the appropriate Service. Examples of joint use medical assets include Joint Blood Program, Army medical evacuation helicopter direct support to Navy hospital ships, and the use of Army medical logistics units as a theater-wide system for all Services under the Single Integrated Medical Logistics Management concept.

### **CURRENT STATUS**

There are several recognized shortfalls in the joint medical planning process. First, current medical doctrine still mirrors the concepts developed during the Cold War. At present, "joint" medical doctrine is a compilation of the three Services' separate medical support principles rather than truly joint, integrated medical doctrine the warfighting Commanders in Chief (CINCs) can rely upon. Additionally, medical doctrine is often developed in isolation without participation from the Line, and may not support the warfighting CINC's concept of operations.

Another shortfall is the lack of modern planning tools available to medical planners. The Medical Planning Module (MPM), a subsystem of the Joint Operations Planning and

Execution System (JOPES), is the primary computer tool used today by medical planners. It dates from the 1970's and has many limitations which hinder its effectiveness, such as the inability to project casualties from Nuclear, Biological, and Chemical (NBC) warfare. Replacing the MPM with a more modern planning tool is a top priority. Additionally, planners lack an effective mechanism with which to objectively measure medical support in a quantifiable way.

The Joint Staff is currently undertaking a study to develop quantitative measures of effectiveness. The ultimate aim of the study is to produce a tool by which the Unified Commander can make an accurate assessment of his true medical capabilities against his stated requirements. Additionally, it will provide a method of evaluating trends in the readiness of assigned medical forces.

## **Medical Planner Development and Training**

### **BACKGROUND**

The ability to produce the detailed medical annexes in the various OPLANs is directly tied to the availability of trained and experienced medical planners at the Unified Commands and their components, the Service staffs, and the Joint Staff. The lack of experienced planners, schooled in all aspects of the various operational planning systems was a particular problem during Operations DESERT SHIELD/DESERT STORM (ODS).

This problem continues. The DoD Inspector General (DoDIG) reported the lack of joint medical planners on the staffs of U.S. Forces Korea and U.S. Forces Japan as detracting from the ability of those staffs to be able to adequately accomplish their assigned missions.

### **CURRENT STATUS**

At present only the Army and the Navy have a defined career specialty for medical planners, and only the Army has a well planned career pathway for them.

The only specialized training available to joint medical planners is the newly established Joint Medical Planners Course (JMPC). Some Unified Commands have made attendance at JMPC a mandatory requirement for personnel reporting to the Command Surgeon's staff.

The JMPC, while a major step forward, only provides the students with a rudimentary knowledge in the many areas covered in the course. An effort was ongoing at one time to consolidate the information taught in the course into a comprehensive medical planning guide. Such a document would distill the myriad of essential skills required of a joint medical planner into one reference document and would serve as a useful adjunct to the JMPC.

While the JMPC is continuing, revisions are being made to the curriculum to ensure it stays current with advances/changes in the field.

## **CONUS Mobilization Planning**

### **BACKGROUND**

During ODS, the Services expanded their CONUS bed capabilities to prepare to receive casualties from Southwest Asia (SWA). Hospitals were designated to receive casualties often without consultation with the medical evacuation authorities who were responsible for moving them. US Forces Command who had nominal authority for CONUS medical mobilization was unable to direct various actions because they were strictly a coordinating agent without command authority.

### **CURRENT STATUS**

In 1993, USACOM was tasked with preparing all CONUS based units to operate in a joint operation. USACOM is charged with preparing integrated force packages which are fully trained, indoctrinated, and equipped for joint operations. Besides the obvious medical implications, USACOM is now responsible for the preparation and execution of the Integrated CONUS Medical Operations Plan (ICMOP), which integrates all CONUS medical assets for support of DoD casualties. The plan concept has been approved and the plan itself is now undergoing staffing. USACOM will have directive authority over those medical facilities the Services designate for the ICMOP.

### **Objectives**

- Ensure true joint planning is the norm and is driven by integrated, forward-thinking doctrine.
- Provide medical planners with the tools they need to develop effective, executable plans.
- Ensure an inventory of qualified, interchangeable medical planners. □



## Chapter 3

# REQUIREMENTS, CAPABILITIES, AND ASSESSMENT

The models and input data used to determine wartime requirements were developed to support a global war. With the fall of the Soviet Union and the end of the Cold War, these tools are no longer valid for measuring requirements for support of two nearly simultaneous Major Regional Contingencies/Conflicts (MRC) as directed by the current Defense Planning Guidance (DPG). In addition to the difficulties encountered with attempting to apply models and data which are no longer relevant to the current threat, there is an increasing problem with the Planning, Programming, and Budgeting System.

## Medical Planning Module

### BACKGROUND

The JOPES MPM is the only approved, standardized system used by the Services, the Unified Commands, and the Joint Staff to predict wartime medical care requirements. It is important to note that MPM computations are limited to the echelon 3 (Combat Zone), echelon 4 (COMMZ), and echelon 5 (CONUS) wartime requirements. Echelon 1 and 2 are based on Service force structure requirements. The MPM is directly linked to the major operational plans Time Phased Force Deployment Data (TPFDD).

The TPFDD provides the most accurate data on the U.S. force Population At Risk (PAR). The MPM provides user defined data on the number and type of "critical" physician, and nurse specialty care requirements. It computes bed requirements, blood, evacuee, and other logistic lift requirements. The MPM is primarily used by the Unified and Service component commands to aid in developing the medical annex of their OPLANs. The Joint Staff employs the MPM during OPLAN review, special studies, and during the Chairman's Program Assessment.

### CURRENT STATUS

The Joint Staff is currently developing the MEPES which will replace the MPM. It is scheduled to be fielded in 1995 and will provide added flexibility to the CINC and Service component planning staffs to develop medical support requirements based on multiple scenarios. The present MPM system does not accommodate force changes within operational zones (OPZONES). In addition to allowing OPZONE force changes, several of the more significant modifications in MEPES include the generation of and calculation of:

- non-unit medical supply, blood, and AE crew and equipment requirements,
- detailed medical personnel requirements by specialty,
- sustainment requirement changes based on 10 day time periods.



## **Casualty Rates Determination**

### **BACKGROUND**

JOPES MPM planning factors are provided in each OPLAN TPFDD Letter of Instruction (LOI). The Wounded in Action (WIA) casualty rates are provided by the Service personnel planners. Based on the threat, combat intensities are provided by the Service plans and operations staff. The only Service medical input into the MPM are Disease and Non-battle Injury (DNBI) rates.

Many of the DoD contingency medical support programs are founded on casualty rate applications that are, at best, difficult to defend. The Services employ "Service specific" planning factors in the MPM to compute bed requirements in support of POM development. The dissimilarities in Service rates, rate development techniques, rate application methods, and the lack of any DoD or Service specific NBC casualty rates have prompted serious questions throughout the planning and analysis communities.

### **CURRENT STATUS**

While the JOPES MPM is the existing tool for determining wartime health services requirements, more accurate and up-to-date casualty rates are needed to generate valid wartime health services requirements. Currently, there have been difficulties in obtaining the needed rates, or agreeing on the comparability of rates from different sources, as the operational situations they are being applied to are ill defined, and the rate categories used cannot be linked more directly to medical records.

Consequently, greater communication between rate developers and users is required. This communication can be facilitated by developing clearly defined operational situations in terms of measurable variables, specifying the method for linking data from medical records with the PCs used to drive medical resources. The potential of augmenting data from medical records with data generated by combat simulations and wargaming should be explored.

## **Event Timing and Roles in the PPBS**

### **BACKGROUND**

Medical requirements generated by the MPM serve as a vital data element for Resource Management personnel developing Service medical POMs. Two significant problems exist with POM requirements determination. The short time period between release of guidance and the Illustrative Planning Scenarios (IPS) does not allow adequate time for wargame analysis and calculation of support requirements.

## CURRENT STATUS

The Section 733 study and the last Service POM requirements are based on the 1995-1999 Defense Planning Guidance IPS developed by the Under Secretary of Defense for Policy (USD/P). IPS must be distributed at least eighteen months prior to POM submission and the Unified/Component Commands should calculate requirements utilizing the same procedures and tools used for operations planning.

## Objectives

- Establish planning factors for 2<sup>nd</sup> through 5<sup>th</sup> echelon medical facilities based on the Time, Task, Treater clinical database. Validate all MEPES planning factors.
- Develop a mechanism to assess requirements and capabilities for combatant commands, Services, and the Joint Staff.
- Develop a methodology appropriate for each Service to ensure a match of casualty rate development and application across the full range of operational situations.
- Include medical requirements to all wargaming activities; and develop interfaces between wargaming tools and existing and future medical models.
- Develop a method for linking real world patient load data with modern patient condition codes enabling planners to forecast medical workload and resource requirements.
- Re-engineer the POM development process to allow time for appropriate CINC input and time to calculate and validate medical requirements in support of the Illustrative Planning Scenarios. □



## Chapter 4

# COMMAND, CONTROL, COMMUNICATIONS, COMPUTERS, AND INFORMATION MANAGEMENT

Command, control, communications, computer, and information systems must be "seamless." That is, they must -

- enable vertical and horizontal information transfer throughout the continuum of medical support, permitting uninterrupted operational capability before, during, and following contingencies;
- be interoperable between functional areas and between Services;
- assure global connectivity;
- have a common "look and feel" among all sub-systems;
- provide ready access to all users.

This chapter of the plan addresses these essential characteristics under three separate categories of systems -

*Command and Control (C<sup>2</sup>)* - includes the policy, guidance, training, modeling and simulation requirements for effective planning, programming, and execution of medical support.

*Communications* - addresses the resource, hardware, and training requirements to ensure that the medical structure has adequate capabilities including trained users to communicate across the operational continuum.

*Information Management* - covers medical information as an essential element of medical communications, and command and control.

## Command and Control

### BACKGROUND

Effective management of the continuum of operational medical support from the battlefield to the level of the National Command Authority relies on the seamless translation of National Security Objectives into execution decisions. All functional areas, including medical, require an integrated system of command and control. Historical proliferation of single lines of communication within functional areas has led to multiple, independent command structures. The Chairman, Joint Chiefs of Staff (CJCS) directed implementation of a single joint command and control system that will integrate all functional requirements. The Joint

Staff Command, Control, Communications, Computers and Intelligence for the Warrior (C<sup>4</sup>IFTW) concept for which the Global Command and Control System (GCCS) is the flagship program, forms the foundation for medical command and control.

### **CURRENT STATUS**

In 1986, the ASD(HA) directed the use of the Joint Operating Planning System (JOPS) MPM to calculate workload based requirements, as an aid to PPBS resource allocation decisions. Following the 1991 termination of the JOPEs modernization program under WAM (i.e., Worldwide Military Command and Control System (WWMCCS) ADP Modernization), additional justification in support of MPM replacement enhancements gave rise to MEPES.

In August 1992, the Joint Staff initiated a restart of MEPES core development following WAM termination. The initial requirement from 1986 was for replacement of the MPM. MEPES core delivers MPM 2.0 which provides medical planners the capability to define population at risk from TPFDD and/or combat simulation models; calculate casualty and patient streams via rate application and/or combat model simulation output; calculate contingency support requirements to include beds (by type), personnel (by Service and specialty), class VIIIA and VIIIB, and evacuees/evacuation resources; generate unit and non-unit time phased force deployment requirements records; calculate supportable evacuation policy analysis; and compile losses for use by the personnel planning community (non-unit personnel generator, and the Individual Mobilization and Replacement Assessment System (IMRAS)). Initial prototyping and fielding of MEPES core occurred in July 1994 and is progressing extremely well towards that goal. Following MEPES core fielding, MEPES Medical Assessment Sustainment Training and Execution Requirements (MASTER) research and development will focus on execution planning and dynamic course of action analysis.

## **Communications**

### **BACKGROUND**

Assured communications are vital to any contingency function, including medical support. Loss of life and diminished personnel and resource accountability are more probable without proper Service, Joint, and Combined communications connectivity. In addition to voice communications, - text, data, visual, and position location communications are vital to dynamic distributed collaborative medical support planning and execution.

The ability to communicate in a timely and reliable fashion has always been a primary requirement for medical units. This is true for both contingencies and exercises.

Communications in a theater are controlled by the communications staff (J6) of the

combatant commanders, and their counterparts on component and Service staffs. They set up the various functional nets, control frequencies, allocate satellite channels, and the like. The basic outlines of the theater communications architecture is set out in the communications annex of the OPLAN or exercise plan.

Although medical, communications, and operations planners worked together, they have not been able to satisfy critical medical communications requirements. Inadequate communications interoperability, training, and resource allocation have contributed to this shortcoming.

### **CURRENT STATUS**

Currently, elements of DoD are using interim "quick fix" solutions to satisfy the shortfall in contingency support communications. The use of commercial satellite systems, like the International Maritime Satellite (INMARSAT), has proved satisfactory as a communications link for the theater medical structure. Commercial Satellite Communication (SATCOM) systems offer reliable service, are easily accessible, have global coverage, and accommodate data transmission. As the DoD tactical SATCOM were saturated with operational communications, commercial satellite systems offered an effective alternative to the medical and communications planners.

There has long been a debate on whether or not medical information such as bed status reports or medical evacuation requests require classification. Recent guidance issued by the Director of the Joint Staff clarified policy on this long standing problem. Medical information in itself is unclassified. However, it may be protected as classified as part of the CINC's overall Operations Security (OPSEC) program to deny information to an adversary.

The Services have undertaken an initiative which should greatly enhance field medicine. Satellites are used to send telemedicine (e.g., teleradiology, telepathology, teleconsultation, and telementoring), clinical information from medical units in the field, back to consulting physicians at COMMZ hospitals and medical centers in the CONUS. The Army, Air Force, and Navy have already successfully employed telemedicine in Somalia and the former Yugoslavia, sending clinical information and extremely high-resolution (diagnostic quality) digital photos from the deployed field hospitals in Mogadishu, Zagreb and Haiti to regional medical centers in CONUS.

## **Information Management**

### **BACKGROUND**

Dedicated medical information systems, which are interoperable across all echelons of care and all Services, are needed. The lack of such systems will only degrade medical support

of the operational forces. DoD Corporate Information Management (CIM) standards and policies are required to ensure integration, interoperability, common user interface, assured standard communications infrastructure, and data standardization.

The lack of integrated information management has been continuously documented since the Civil War as a critical weakness in the provision of medical care. The problem still exists as confirmed by many after action reports, lessons learned, and inspections.

During ODS, one of the main concerns of unit commanders was the condition and location of their personnel who were in the medical evacuation and hospitalization system. The information systems were unable to easily identify and track patients as they moved from the battlefield. Additionally, the need was recognized for redundant sources of key personnel data on each Service member. A continuous flow of current information is essential to medical treatment and enhanced beneficiary care. It can save considerable time for patient administration as well as for personnel and casualty management; and will improve availability of key medical history information.

#### **CURRENT STATUS**

Given the uncertainty and multiple variables in contingency operations, redundant mechanisms are necessary to ensure information continuity. An individually carried data storage device will allow such information to be readily accessible. This technology is a significant business process improvement opportunity that can serve as the medical information gateway for future interoperable systems to provide maximum resource utilization, global continuity of care, and continuous flow of information across echelons.

An updatable individually carried data storage device currently being explored is the Multi-technology Automated Reader Card (MARC). A MARC proof of principal is underway to address time to read/record data, accuracy, quality, usability and value added of each data element, ease of operations, labor intensity and interference with patient care, speed, durability, and environmental characteristics. If a requirement exists for storage and retrieval of more detailed data, then a technology sufficient to meet the need will be examined.

An ongoing initiative of the DoD is the development of the integrated Theater Medical Information System (TMIS). To ensure integration, interoperability, common user interface, redundant standard communications infrastructure, and data standardization, TMIS is being developed within DoD Corporate Information Management standards, policies, and procedures. TMIS is to be a seamless system.

Medical support applications of emerging technologies show considerable potential. Current initiatives exploring advanced technology include telemedicine, remote personal status monitoring, and clinical anchor desk.

## **Objectives**

- Ensure the medical structure has a robust, seamless, and assured communications capability within the global communications architecture.
- In accordance with C<sup>4</sup>ITW concept, consolidate medical command and control requirements into a single interoperable capability to be part of GCCS.
- Satisfy the validated requirement for an updatable, individually carried data storage device with read/write capability.
- Satisfy the validated requirement for a seamless medical information system serving contingency support and beneficiary care across all echelons. □





## **Chapter 5**

# **LOGISTICS**

The main function of the medical logistics system is to ensure the right medical equipment and supplies are available when and where they are needed. It is a complex task requiring the management, review, and coordination of a multitude of functions and programs including: determining clinical requirements; programming the various funds required; executing the procurement actions; fielding equipment in a complete and capable unit; prepositioning these units in a configuration and at a site which will allow the unit to meet its medical mission in the time frame required; sustaining and modernizing the supplies and equipment issued to our medical units; procuring the appropriate levels of non-medical support equipment to ensure that medical units can meet the mobility and communications requirements of their missions; and managing the War Reserve (WR) program to ensure sufficient stocks are not only on-hand and pre-positioned, but that the dated and deteriorative stocks are managed in the most cost effective manner.

The logistics support environment has changed dramatically since ODS. The force structure has been reduced, and emphasis on Joint Warfare, and OOTW have increased. At the same time, the medical logistics practices used in supporting peacetime health care are in the midst of dramatic change. These changes must be addressed and action taken to ensure that medical logistics support structures continue to be responsive to the readiness mission.

A variety of groups, committees and agencies are addressing the various medical logistics issues. Each of the Services has ongoing processes to improve medical logistics support. In addition, there are a number of efforts underway to address Joint Service issues. This MRSP- 2001 provides coordination and oversight for the myriad of actions that are ongoing and coordinates the actions of the Services with the policies and priorities provided in DPG.

## **Deployment and Sustainment**

### **BACKGROUND**

Deployment and sustainment support involves providing both medical and non-medical materiel to the operational user level and maintaining those assets through the product/program life cycle. All medical materiel supporting the fighting force, especially dated and deteriorative items, must be integrated with support plans to ensure timely deployment of assets and sustainment of theater capability. In addition, those items not readily available in the commercial market place must be identified and logistically supported to ensure prompt availability.

Traditionally, medical materiel support was accomplished by buying medical materiel

in large quantities from the manufacturers, placing that materiel into Defense Logistics Agency (DLA) depots, and issuing the materiel when it was requisitioned by medical units/platforms. Based on this method of support, capability was measured in terms of inventory levels.

#### **CURRENT STATUS**

The Department's changing peacetime medical logistics practices such as "Prime Vendor" support and "Just-In-Time" inventories are fast eroding the capability to support operations from DLA depot inventories. It is critical that new business practices be explored to support wartime and contingency operations. These new practices must focus on rapid access into the commercial medical logistics base.

The integration of changing peacetime medical logistics business practices with deployment and contingency support requirements is being addressed through the Medical Readiness/Business Practice and Ad-Hoc Committee. This committee is a subcommittee of the Joint Services Medical Logistics Coordinating Group of the DMSB.

The exploration of new practices must be accompanied by new approaches to assessing support capabilities. Capability to support contingencies can no longer be expressed simply by counting Service and DLA owned inventories. The capabilities purchased from the private sector need to be quantified and included in the capability assessments. A renewed emphasis must be placed on Industrial Preparedness Planning (IPP) to identify industrial base production capability and sources that could be utilized to meet wartime needs. "Military unique" medical items, and those items that are not plentiful in the commercial medical logistics base must be identified, and industrial preparedness measures applied to insure the availability of critical medical materiel, to include medical materials needed for NBC defense.

The Services must jointly ensure an acquisition and support plan is in place to support deployment and sustainment for wartime, contingencies, and OOTW. A critical balance must be struck between the quantities of dated and deteriorative materiel maintained for early deploying units and reliance on the industrial base for surge requirements and initial issue requirements. Consignment contracts for dated and deteriorative materiel and Prime Vendor contracts with contingency support provisions could potentially minimize DoD's investment in dated and deteriorative inventories.

The total medical materiel WR requirement must be computed annually by the Services based upon the DPG. This requirement must be passed to the DLA. A current and realistic requirement is critical to the development of a viable medical readiness program at DLA.

In order for IPP to work, existing tools such as the D-Day Significant Item List and

accompanying risk factors must be used. Industry input must be solicited to take advantage of industry standards and tools in assessing industrial base potential.

## **Totally Equipping the Force**

### **BACKGROUND**

"Totally equipping the force" is defined as providing the right medical and non-medical materiel to the operational user level at the right time and in the right amounts. Medical end items; assemblages; Sets, Kits and Outfits (SKOs); supplies, etc., must be integrated with support materiel necessary to conduct medical operations (e.g., utility support, messing, quartering, transportation, and personnel support). Sustainment and modernization of both medical and non-medical assets is critical to supporting deployed forces.

Rapid advances in medical technology, computers, and communications capability, to name just a few areas, demand a continuous reassessment of medical support capability to ensure it keeps pace with changing operational requirements and new treatment modalities. This involves the systematic identification of needed upgrades in both equipment and consumable supplies. It also requires a systematic program for introducing these changes across the medical force structure.

Maintenance of assets, whether operational, prepositioned ashore, prepositioned afloat, or held in long term storage is of paramount importance. Equipment must be maintained at levels compatible with unit and assemblage tasking. Stocks of supplies and repair parts must be adequate to support deployment timelines.

### **CURRENT STATUS**

The initial procurement phase of the DEPMEDS program is complete. The challenges currently faced are how to sustain and modernize these hospitals. Of particular concern is the challenge of improving the deployability and mobility of DEPMEDS equipped hospitals by reducing their weight and cube without degrading their combat casualty care capabilities.

Storage plans for DEPMEDS which support changing scenarios present in DPG must be developed and resourced.

Augmentation sets which can be applied to DEPMEDS and non-hospital (i.e., echelon 1 and 2, and other non-DEPMEDS) assemblages are needed to support OOTW.

Efficient plans for the retrograde, rebuild, and reconstitution of all medical assemblages and SKOs to ensure assets are properly maintained and/or retrofitted following deployment, are required to meet new operational taskings. Policy should be established requiring the periodic rebuild/refurbishing of assets.

To ensure quad-Service commonality and consistency, the DEPMEDS database must be maintained in a timely manner consistent with approved changes, and to ensure new approved capabilities are added. Also, the hospital ships (T-AHs) and the Casualty Receiving and Treatment Ships (CRTSs) need to be integrated into the DEPMEDS standardization process.

A seamless process for managing patient movement items across the Services and echelons of care must be developed by standardizing the equipment and supplies used during patient evacuation by land, sea, and air, and by integrating the aeromedical certification process between the Services and agencies.

Non-medical items of equipment critical to the functioning of medical units, such as power generation equipment, vehicles, and communications equipment, must also be sustained and modernized to ensure that medical capabilities keep pace with mission requirements.

## **Logistics Support Systems and Communications**

### **BACKGROUND**

The difficulties in communicating medical logistics data during ODS are well documented in the Joint Uniform Lessons Learned System (JULLS), and subsequent GAO and IG reports. The difficulties centered on the inability to transmit or receive logistics data because of inadequate communication links, and the lack of interoperability between the Services medical logistics information management systems. The capability to transmit logistics data was inadequate between units of the same Service, and virtually non-existent across Service lines. File compatibility issues prevented effective exchange of data even when disk to disk transfer was attempted.

### **CURRENT STATUS**

Current medical logistics doctrine calls for SIMLM systems to be established in support of operational plans. The SIMLM concept is operational in peacetime in U.S. European Command (USEUCOM) and Korea. In order to effectively manage SIMLM operations, the automated medical logistics support systems need to be interoperable and communications links established to allow the rapid transmission of medical logistics data. SIMLM doctrine will be included in Joint Pub 4-02, *Health Services Support in Joint Operations*.

Communication and interoperability between existing medical logistics systems are being addressed by the U.S. Central Command (USCENTCOM) sponsored Medical Logistics Working Group. USCENTCOM, in cooperation with the Services, the Joint Staff, and OASD(HA), succeeded in prototyping a system and procedures based on the Defense

Automated Addressing System (DAAS) and satellite communications that allow interoperability between the Services existing medical logistics systems. The process for using the DAAS mailboxes in conjunction with DAASO Automated Message Exchange System (DAMES) or the Streamlined Alternative Logistics Transmission System (SALTS) communications interfaces and available communication links [i.e., INMARSAT, Defense Data Network (DDN), or commercial phone lines] to exchange medical logistics data has been successfully demonstrated. The prototype is called the Quad-Service Satellite Transmission and Receiving System - Medical Supply Support (QSTARS-MS<sup>2</sup>). As a near term solution to the interoperability problem, QSTARS-MS<sup>2</sup> needs to be adopted as the interim medical logistics standard. The communications equipment associated with QSTARS-MS<sup>2</sup> must be resourced by the Services.

The long term solution to interoperability includes the development of the next generation quad-Service medical logistics automated support system under the DMLSS system project. DMLSS will provide a single medical logistics system for use by all Services in both peacetime and wartime. DMLSS will serve as the medical logistics component of TMIS. The DMLSS project is an approved and funded CIM initiative. The primary senior coordinating body for DMLSS is the Medical Logistics Proponent Subcommittee (MLPS).

## **Joint Medical Logistics Planning**

### **BACKGROUND**

Joint medical logistics planning involves identifying materiel needed to support deployment and sustainment of medical forces, identifying appropriate medical logistics structure to support joint operations, and assessing the medical materiel readiness of medical units/platforms.

Problems have been identified in the current readiness reporting system. Readiness is reported in quantitative and qualitative terms that are subject to Service, command, and activity interpretation. While quantitative reporting is fairly well defined, guidance for reporting qualitative readiness is lacking.

### **CURRENT STATUS**

The increasing recognition of the joint nature of future deployments has emphasized the need for joint and integrated medical logistics planning. Joint planning ranges from the development of common processes for determining requirements and assessing medical logistics readiness, to the development of joint doctrine for medical logistics support in an operational theater. The results of joint planning need validation through the inclusion of realistic medical logistics play in joint exercises.

Enhanced transportation planning is critical to ensure adequate and timely support to the CINCs. New business practices are changing how medical materiel is transported overseas. Commercial air carriers now serve as the routine channel for medical resupply transportation. The AE CRAF program continues to represent an untested method for transporting medical materiel into a theater of operations. The use of Air Mobility Command (AMC) aircraft represents a third mode of air transportation support, and perhaps the only channel available during the opening stages of a conflict or contingency. Existing peacetime practices, and the transportation plans for supporting contingencies must be integrated to ensure that needed linkages into the CONUS medical materiel distribution systems exist and are routinely exercised.

The CINCs must develop plans for including joint medical logistics support in joint exercises. The adequacy of joint medical logistics doctrine, and the interoperability of medical logistics support systems must be tested through realistic joint exercises.

The specific tactics, techniques and procedures for providing medical logistics support in joint operations are being developed for publication in Joint Pub 4-02.1, *Health Services Support Logistics in Joint Operations*.

## Objectives

- Develop and update acquisition and support plans that support the full spectrum of military operations.
- Ensure that DEPMEDS, other medical assemblages, medical SKOs and non-medical materiel are maintained, refurbished and modernized in a timely manner to provide quality medical care and capability to support operational requirements.
- Provide medical logistics information management systems and communication systems which allow the transmission and exchange of logistics data within a theater of operations, and with the supporting base (i.e., the COMMZ or CONUS).
- Develop common baselines for computing medical materiel sustainment requirements and reporting unit or platform medical materiel readiness. Integrate this information into joint medical planning processes. □

## **Chapter 6**

# **MEDICAL EVACUATION**

Medical evacuation through the continuum of medical care may require any combination of air, ground, or sea resources. To ensure that patients receive continuous, timely, quality care, all personnel involved in the evacuation system must be fully trained; and essential evacuation assets (i.e., personnel, platforms, equipment, and supplies) must be programmed, procured, and sustained.

Establishing a seamless evacuation system requires changing evacuation doctrine and concepts of operation, modernization and sustainment of platform capabilities, increased interoperability of Patient Movement Items (PMI), and improvements in system command and control.

## **Evacuation Doctrine and Concepts of Operation**

### **BACKGROUND**

Historically, the Services have managed patient evacuation processes with different command and control systems. Evacuation decisions were based on the patient's location and whether the required move was intratheater, intertheater, or a combination of the two. ODS lessons learned showed these systems were not interoperable. Extensive procedural changes were required to transition from peacetime to wartime operations.

Since ODS, efforts have focused on integrating patient movement processes and command and control systems. Achieving a single, seamless evacuation system requires interoperability not only between system processes but also between Service doctrines.

### **CURRENT STATUS**

The warfighters' capability to move rapidly is making the provision of definitive forward medical support more difficult. There is a potential for increased early casualty evacuations to rear area medical facilities, i.e., a shorter evacuation policy, for that definitive care. Capabilities supporting this potential evacuation mission increase must be identified and programmed.

While evacuation by air is preferred, ground and sea evacuation may be the more appropriate option in future operation scenarios. The capability to conduct sea and/or ground evacuation operations, either alone or as part of an integrated evacuation system, must be enhanced. The Services are programming and procuring resources for their specific missions with no provision for interoperability. Future planning must be flexible enough to support one Service's operations with another Service's assets, e.g., dedicated Army evacuation helicopter support to Navy hospital ships.



RC personnel represent 93% of the Air Force's Aeromedical Evacuation (AE) manpower. Contingencies requiring protracted AE support such as Operation Restore Hope are demonstrating the need to gain access to the RC prior to a Presidential Selected Reserve Call-up.

Planning for CONUS casualty reception and redistribution must consider implementation of DoD health care regionalization, USACOM's role in the ICMOP, and potential changes to the roles and missions of C-9A aircraft.

## **Platform Capability and Modernization**

### **BACKGROUND**

Medical evacuation equipment must be interoperable, reliable, and sustainable. Platform and equipment modernization has not kept pace with either the combat forces or the changes in defense strategy. The ability to support evacuation scenarios ranging from OOTW to major regional contingencies/conflicts is severely limited.

### **CURRENT STATUS**

Modernization and/or procurement of evacuation system components is hampered by the Services' competing priorities of combat and combat support. For example, while the UH-1V is considered logistically and operationally obsolete, the Army has not modernized either this helicopter or the UH-60 to the UH-60Q as part of the Aviation Restructure Initiative.

Ground evacuation is programmed and resourced by the individual Services, usually to support their own deployed medical units. There is no standard process for assessing, quantifying, and integrating the number and type of resources or the support required for contingency ground evacuation operations.

Sea evacuation is not routinely included in operation plans; and no sea resources are identified to assume secondary roles as medical evacuation vehicles within or between theaters. The Navy provides evacuation between ships at sea and from ship-to-shore using opportune helicopter and boat assets.

AE remains the preferred mode of evacuation. While reliance continues on opportune C-130 (intratheater) and C-141 (intertheater) and on dedicated C-9A and CRAF Boeing B-767 missions, policies and procedures need to be developed to better monitor, program, and report on requirements and capabilities of these and future aircraft.

- Both the C-130 and the C-141 fleets are overburdened with critical support missions and can not be relied upon to be available in sufficient numbers to support aeromedical evacuation mission requirements. The theater CINC decides if aircraft are dedicated to full-time aeromedical evacuation support. Even then, an aircraft's organic on-board stanchions

and straps may not always be available due to fair wear and tear, breakage, and loss impacting the aircraft's ability to provide maximum evacuation capacity. Additionally, both fleets are aging and increasing attention is needed to program aeromedical evacuation capability in future aircraft.

- Dedicated AE CRAF is still required to reduce demands on the C-141 fleet and to provide a survivable intertheater evacuation capability. Thirteen Boeing B-767s are dedicated to provide this capability during a national emergency and the Air Force is procuring aeromedical ship sets with which to outfit the B-767s. U.S. Transportation Command has made some aircraft available at CRAF Stage 2, which should improve the ability to meet aeromedical evacuation mission needs. Even so, CRAF may not always be available, continuing the need to maintain the C-141's medical evacuation mission support capability.

- The historically programmed overseas deployment of the CONUS-based C-9A fleet, which generated the need for AE CRAF airlift to augment patient redistribution within CONUS, is not certain to continue in future planning. The contingency roles, missions, and requirements of the CONUS-based C-9A fleet need to be reassessed and revalidated.

## **Patient Movement Items**

### **BACKGROUND**

Medical equipment accompanying evacuation patients must be interoperable on all platforms, and readily accessible by both the evacuation system and the Service Medical Treatment Facilities (MTFs).

### **CURRENT STATUS**

Service MTFs use PMI which are not always interoperable with the other Services or with the evacuation platforms on which patients are transported. PMI approved for use on AE missions are not always available in deployed contingency medical units and are difficult to recover and return once they have departed with a patient.

## **Medical Evacuation Command and Control**

### **BACKGROUND**

The command and control throughout the evacuation system - including visibility of personnel, equipment, and in-transit patients - continues to be a major issue.

### **CURRENT STATUS**

Responsibilities for planning and operating the evacuation system's component parts is spread between multiple Services and commands. The DoDIG found that operations plans

did not always promote the sharing of medical assets, leading to confusion over responsibilities and exacerbation of pre-existing resource shortages.

U.S. Transportation Command (USTRANSCOM) and its air component, HQ AMC, have undertaken initiatives to integrate C<sup>2</sup> activities into a single process providing global and theater visibility of available beds, mission status, and in-transit patients. Since ODS, USTRANSCOM established a Joint Casualty Evacuation Working Group (JCEWG) to identify and resolve intertheater (strategic) issues. Theater CINCs and component commanders identify and resolve intratheater (tactical) evacuation issues for their theaters of operation. There is, however, no centralized activity overseeing or managing resolution of both intra- and intertheater issues. Issues which could be worked by such a group include, but are not limited to, intratheater ground, fixed-wing, and rotary-wing operations, AE flight crew training, ship-to-shore support, and those areas already being addressed by the JCEWG.

## Objectives

- Ensure timely availability of required personnel or units to accomplish the medical evacuation mission.
- Define patient evacuation requirements and develop enhanced medical evacuation capability that accommodates shorter theater evacuation policies by all Services.
- Develop CONUS casualty reception and distribution plans, as well as intra-regional execution methodologies.
- Develop an integrated capability for medical evacuation that includes rotary-wing, fixed-wing, land and sea assets.
- Develop joint doctrine for the joint use of evacuation assets to include dedicated air ambulance support to USMC contingency operations and establishment of a TPMRC.
- Develop joint doctrine for the entire medical evacuation system to ensure all levels of evacuation are sufficiently resourced, interoperable, integrated into a seamless system, and provide in-transit visibility of patients.
- Develop and execute a program to procure and/or modernize evacuation platforms.
- Ensure PMI are standard and interoperable among the Services and are operable aboard evacuation aircraft by developing a system to certify, track, maintain and recover PMI.
- Identify integrated patient transportation C<sup>2</sup> systems to ensure seamless patient transfer and maintain visibility throughout patient movement. ▣

## **Chapter 7**

# **MANPOWER AND PERSONNEL**

The Department must aggressively recruit and retain the appropriate personnel skill mix to meet the medical needs of our military forces. Systems and procedures to ensure adequate medical personnel are available to provide health care for the service member and other beneficiaries must be developed and maintained.

### **BACKGROUND**

Assessments of medical readiness conducted by the Joint Staff, DoD and the individual Services indicated a shortage of personnel to support the medical requirements. Since then, the 1988 MRSP, Congressional hearings, and numerous other reports documented deficiencies and recommended actions aimed at improving medical personnel readiness. In response to these assessments, recruiting and training programs within DoD have changed significantly in recent years.

Since the early 1980's, DoD has been successful in recruiting, training and retaining the medical personnel needed to meet the budgeted active duty end strengths. In an effort to increase the retention of qualified health care providers, several modifications were made in the incentive and special pays. DoD began efforts to improve the management of the Service Graduate Medical Education (GME) programs in order to increase surgical training billets and decrease other specialty training that is less critical to wartime needs. In addition, in 1991, Congress, in order to protect medical manpower from arbitrary cuts as the military reduced in size, required DoD to certify that reductions in medical personnel below the 1989 level were excess to the needs of the Service and would not increase costs for health care.

Simultaneously, a variety of programs were implemented, in the late 1980s, to reduce shortfalls of Reserve medical personnel. These actions included personnel incentives such as the Health Professional Loan Repayment, Health Professions Stipend Program for Reserve Service, the Selected Reserve Health Care Professional Bonus Test and special pays for physicians; recruiting initiatives included a change in appointment and retention age, constructive service credit for civilian experience, an increase in the recruiting force, and a national awareness campaign; and management initiatives such as accelerated appointment, the sponsorship program, and the nurse retention study.

A problem which complicated the skills shortfall during ODS was the inability to quickly verify training, credentialing, licensing, and privileging for individuals and units. There were no real time systems which permitted the skill readiness of the individual or units to be rapidly assessed. A similar shortfall surrounded the medical fitness of the military force. We lacked an easy yet accurate way to verify the medical fitness of our military forces, especially within the Reserve components.

In addition to personnel skill shortfalls, the military preparation of medical personnel was problematic during ODS. Thus, the Army developed a special training curriculum, to be attended prior to activation, for personnel who had not attended an officer orientation course.

### **CURRENT STATUS**

The current turbulence surrounding medical force requirements and sizing criteria, Active/Reserve mix, and the health professionals skill mix, is impacting the ability to develop strategies to improve the overall status and readiness of the medical force. Force reductions and budgetary constraints have focused attention on the effectiveness of recruiting and retention tools, the scope and size of GME programs and entry level training requirements.

### **Objectives**

- Recruit and retain qualified Active and Reserve medical personnel to meet military medical requirements by specialty and grade.
- Ensure a consistent set of medical deployability criteria is used by all Services.
- Develop a program to ensure that all Active and Reserve newly accessed medical personnel attend the required entry level military training within twelve months of accession.
- Optimize Service GME programs, ensuring they satisfy physician requirements by specialties and numbers.
- Validate requirements and establish early authority to mobilize RC medical forces to integrate with active duty immediate deployment forces. ■

## Chapter 8

# TRAINING

Although sensitive to the need for medical readiness training prior to ODS, DoD had not established specific training policies, standards and guidelines. There was also inconsistency in formalized and enforced medical readiness training across the Services. In retrospect, the focus during peacetime emphasized health care delivery and Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) cost reduction, often at the expense of medical readiness.

### BACKGROUND

The military health services system provides comprehensive care to active duty personnel and eligible beneficiaries. This has resulted in a peacetime care orientation with an active duty specialty skill mix of personnel and training programs that differ significantly from skills required to support wartime operations and OOTW needs. This emphasis on maintaining peacetime health care impeded the Services ability to provide field medical training to these health care personnel.

Currently, Service medical training programs are designed to reach two separate audiences: non-medical and medical personnel. The medical community provides instruction in first aid and preventive medicine concepts to non-medical personnel. In turn, these personnel train their units in basic medical techniques to keep themselves and their fellow service members physically and mentally fit, and alive if injured.

Medical personnel, both officer and enlisted, receive training through military and civilian sources in specific clinical skills. They may receive additional training to enhance capability such as leadership development, basic combat skills, and techniques for providing combat casualty care. This training is designed to begin at initial entry into military service followed at periodic intervals with refresher or more advanced training.

In August 1991, the Assistant Secretary of Defense for Health Affairs chartered the Joint Medical Readiness Education Council (JMREC), to provide executive level oversight of joint medical readiness training. The JMREC formed a Training Advisory Group (J-TAG) in October 1992, and tasked this working group to -

- define medical readiness training to include joint training requirements,
- identify the training programs currently in the Services,
- assess the mission, function and requirements for the Joint Medical Readiness Training Center (JMRTC), and

- evaluate the overall mission of the JMREC.

In November 1992, the CJCS, directed "...a thorough review of all technical and operations technical training sequentially, across the combat service support, combat support, and combat operations functional areas..." to combine training and reduce costs. The Health Care Committee of the Inter-Service Training Review Organization (ITRO) is assessing medical training programs, and have identified several specialty training skills for in-depth analysis and consolidation.

Medical exercises were increasing prior to 1989, particularly in Europe. Since 1989, medical involvement in the various exercises held by some of the Unified Commands has decreased markedly. Exercises are an ideal way to test the validity of concepts, doctrine, and the soundness of the operation plans. The loss of medical play in exercises prevents the testing of some contingency medical systems which do not operate on a day-to-day basis such as blood transshipment centers, wartime medical regulating, wartime communications, and the activation of the various wartime host nation support agreements with allies.

Another exercise shortcoming has been the lack of designated RC call-up to backfill CONUS MTFs as active duty personnel deploy, to test the viability of assumptions in the ICMOP.

## **CURRENT STATUS**

There is an ongoing need within both the Active and Reserve forces for individuals to practice their operational skills in an environment that simulates contingency situations. Currently each Service conducts field medical training activities. The scope and depth of these activities varies between the Services. In addition, the JMRTC provides the Combat Casualty Care Course (C4), which is a Tri-Service field training experience, and mobile training programs. The JMRTC courses are undergoing a review for currency and utility.

The Joint Staff is inserting medical objectives in major exercises with the intent of generating some medical participation. Certain Unified Commanders have been proactive in detailing medical objectives and participation in exercises several years out to allow advance planning and resourcing.

## **Objectives**

- Establish a DoD system to provide and monitor medical readiness training.
- Develop a mechanism to ensure DoD-wide minimum competency levels for unique specialty areas.

- Maximize DoD-wide utilization of field medical training sites to enhance interoperability and shared training.
- Increase opportunities for Active and Reserve medical interface in Service specific and Joint/Combined exercises. □





## Chapter 9

# BLOOD

In accordance with DoD Directive 6480.5, the Armed Services Blood Program Office (ASBPO), a joint health agency, is chartered to monitor implementation of the ASD(HA)'s blood program policies, and to coordinate the blood programs of the Unified Commands and the Military Departments.

### BACKGROUND

In 1983, the Defense Medical Standardization Board (DMSB) requested the ASBPO conduct a "zero-based" analysis of military blood program requirements for the next twenty years. A program analysis report entitled *Military Blood Program 2004* (MBP 2004) was published. Significant recommendations of the MBP 2004 report were the need for blood at the second echelon and the use of frozen blood products.

In May 1985, the ASD(HA) approved the MBP 2004 report for implementation. In June 1985, the ASBPO convened a panel of subject matter experts. The panel devised a master plan and milestones for implementing the MBP 2004 project. The MBP 2004 implementation master plan involves coordination of all military blood program projects and modification of the current system to conform to the MBP 2004 model. The project coordinator is the Director, ASBPO.

### CURRENT STATUS

The concept for blood support is generic by design. Each Unified Command and/or Military Department will devise a more detailed plan based on this concept. Blood support is a combination of medical, technical, operational and logistical systems and must be considered separate from clinical laboratory support. The ASBPO, in conjunction with the DMSB, establishes policies for the use of resuscitation fluids. However, the management and distribution of all resuscitation fluids, including albumin, is a medical logistics function. Blood and blood products are in supply class VIIIB, while all other medical items are in supply class VIIIA.

In October 1993, the ASBPO convened panels of subject matter experts to revisit and update the MRSP. The panels recommendations were approved by the ASD(HA).

### Objectives:

- Maintain the ASBP which provides quality blood products and services to meet all DoD requirements.
- Develop joint blood doctrine to meet combatant command requirements.

- Complete the worldwide fielding of frozen blood to designated Unified Commands and develop improvements in frozen blood technology.
- Develop and maintain peacetime blood operations which support the continuum of military operations.
- Comprehensively update wartime blood requirements and develop programs, doctrine, policies and procedures to ensure implementation.
- Monitor and assist blood and blood substitute research and development; incorporate new technologies as they become available. □

## **Chapter 10**

# **READINESS OVERSIGHT AND EVALUATION**

The successful implementation of the MRSP-2001 relies on an effective oversight mechanism and evaluation plan. Since in-depth assessment of medical readiness has historically been difficult to accomplish due to Service variances, proprietorship and the demands of peacetime beneficiary care, an oversight/evaluation mechanism must be developed.

### **Concept for Managing Readiness**

#### **BACKGROUND**

During FY-94, the JMREC Training Advisory Group reviewed Department level committees, councils, work groups, etc., involved in some aspect of medical readiness. An existing oversight group linking all the functional areas/elements of medical readiness together was not found. The J-TAG recommends modifying the mission of the JMREC.

#### **CURRENT STATUS**

Currently, the Defense Medical Advisory Council (DMAC) is the senior level body providing advice to the ASD(HA) in the execution of the DoD medical mission. The J-TAG proposes the creation of a new committee, the Defense Medical Readiness Committee (DMRC).

The DMRC would replace the JMREC with an expanded, comprehensive medical readiness charter. Advisory groups would be created for each functional area addressed in the MRSP 2001 (and possibly others) and would report to the DMRC periodically. Groups, committees, or councils which already exist in these functional areas would either report through their respective advisory group, or would be inactivated. Other issues would be addressed as needed to guarantee the medical readiness of the force.

As a minimum, a medical readiness update would be provided semiannually.

### **Objective**

- Establish DoD process to monitor medical readiness. □



## Appendix A

# STRATEGIC ACTION PLANS

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# ACTION PLAN

CATEGORY: Planning

ACTION ITEM #: 1

SUBJECT: Joint/Combined Planning

BACKGROUND: Current medical doctrine was designed to support the Cold War paradigm of providing health service support (HSS) for combat operations against the Soviet threat. At present, joint medical doctrine is simply a compilation of three separate Service doctrines, rather than the integrated, truly joint doctrine upon which the warfighting commander in chief (CINC) can rely. Further, medical doctrine tended to be developed separate from "Line" warfighting doctrine and concept of operations, and was primarily based on the Services responding to total theater bed requirements vice specific medical capabilities to match the warfighting CINC's required capabilities. This paradigm and separation affected the types of hospital assemblages, normally large and heavy, requiring significant support to operate and which competed for constrained, critical, strategic lift resources. Additionally, command and control of HSS assets has been separated by service component and was not easily coordinated.

Existing service and joint medical doctrines, and medical assets to support them, are not responsive to the full continuum of anticipated contingencies: peacekeeping and peacemaking, disaster relief, humanitarian assistance, lesser regional contingency, major regional conflicts, and noncombatant evacuation operations (NEO), while at the same time providing for the continuity of beneficiary care. In short, HSS planning must evolve and can no longer support "throwing hospital assemblages" at theater bed requirements to support containing and responding to the Soviet threat. A new joint and combined medical planning doctrine is necessary to support the current national military strategy and that anticipated in future years, especially during this fiscally constrained decade.



**DISCUSSION:**

Joint medical doctrine to support the national military strategy needs to be integrated with "Line" doctrine. The doctrine must be truly joint and combined, consider the full continuum of contingency operations, and must drive capability structure and acquisition of assets.

The doctrine developers and CINC's medical planners must improve methods of documenting operation plan (OPLAN) medical and support requirements to ensure joint interoperability and integration. Echelon 3 and echelon 4 medical assets are joint use theater assets, and must be apportioned both in the Joint Strategic Capabilities Plan (JSCP) and the "Forces for the Unified Commands" documents. Moreover, it is essential that the medical planning community prepare the medical force requirements to support joint and combined force packaging. The collective results, when coordinated with the warfighting CINC concept of operations and medical requirements, will provide the direction for the Services to program and build medical capability.

**OBJECTIVE:**

Ensure true joint planning is the norm, and is driven by integrated, forward-thinking doctrine.

**TASKS:**

a. Continue development of joint and combined medical techniques, tactics, and procedures for theater HSS, and ensure full integration with Line doctrine to support the national military strategy.

(1) Integrate Service medical doctrine centers in Service doctrine centers.

(2) Assign qualified medical planners to the joint doctrine center.

(3) Consider the feasibility of creating a medical plans liaison billet with the United Nations staff.

b. Develop medical force packages:

(1) Develop integrated Service and joint medical force packages designed with flexible

organization and capability to meet the continuum of readiness missions.

(2) Ensure Service "re-engineering" efforts are coordinated for joint integration of medical forces and assets.

c. Ensure guidelines in Joint Operations Planning and Execution System (JOPES) guidance for documenting/writing medical support plans encourage joint concepts and approaches.

PRIMARY ACTION OFFICES:

- a.(1) The Services
- a.(2) The Services
- a.(3) Office of the Assistant Secretary of Defense for Health Affairs (OASD(HA))
- b. U.S. Atlantic Command (USACOM)
- c. Joint Staff

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# ACTION PLAN

CATEGORY: Planning

ACTION ITEM #: 2

SUBJECT: State of the Art Planning Tools

BACKGROUND: Numerous references are required by medical planners. Principal among these are joint doctrinal publications and joint tactics, techniques, and procedures (JTTP) publications. These are routinely drafted by a single Service, reviewed by Services, unified commands, and selected component planners, but rarely lose their single-Service flavor.

Short of OPLAN execution, there are no quantifiable mechanisms presently in place through which the effectiveness of medical planning may be measured.

Continuing education, refresher training, "just-in-time" training are all necessary tools to aid the planning process. Such ongoing training is required by planners to ensure familiarity with the most current doctrine, plans, and means to accomplish planning and execution objectives. In addition, attendance at such training by other medical department personnel (unit commanders, physicians, etc.,) will enhance overall support of readiness objectives throughout the medical departments.

DISCUSSION: Existing reference materials are fragmented, archaic, incomplete, and often inaccessible to the planner.

While some measuring and evaluation systems may exist (e.g., logistics sustainability analyses, joint and combined exercises), they fail to present a set of clearly measurable factors by which effectiveness may be objectively assessed. As a consequence, planners continue to plan and execute without the ability to periodically stop and evaluate the effectiveness of their plans.

Numerous courses, conferences, and meetings will

continue to be available which address various aspects of planning, both medical and non-medical; these may be underutilized by planners due to lack of publicity, lack of funding, and a poorly recognized need.

**OBJECTIVE:**

Provide medical planners with the tools they need to develop effective, executable plans.

**TASKS:**

- a. Provide medical planners with effective and accessible Joint publications which reflect current doctrine, JTTP, and which incorporate combined, coalition, and unconventional planning.
- b. Develop Service doctrine which is consistent with Joint doctrine - both line and medical.
- c. Develop and publish a single medical reference tool that summarizes, without replacing, existing medical Joint Pubs, JTTPs, and other reference materials.
- d. Exploit the latest state-of-the-art training and education modalities and multi-media technology to ensure maximum effectiveness, accessibility, and currency of all documents.
- e. Develop clear, quantifiable measures of effectiveness for operational plan development and assessment.
- f. Ensure availability and awareness of continuing education and refresher training for medical planners, and other medical department personnel.

**PRIMARY ACTION OFFICES:**

- a. Joint Staff
- b. The Services
- c. Joint Staff
- d. Joint Staff / The Services
- e. Joint Staff
- f. Joint Medical Readiness Training Center

## ACTION PLAN

CATEGORY: Planning

ACTION ITEM #: 3

SUBJECT: Career Development of Medical Planners

BACKGROUND: In April 1984, a Medical Review Group issued its "Report on Medical Readiness Planning in the U.S. European Command." This report detailed serious deficiencies in medical readiness caused by a lack of resources and planning. The report established the need for qualified medical planners at all echelons of operational planning systems.

At present only the Army and the Navy have a career specialty for medical planners. Only one Service has a well planned career pathway for them and numerous recommendations exist for career specialty in Medical Planning.

A joint medical planning presence is needed to provide oversight, validation, and inter-Service coordination of Service medical mobilization plans and theater assets. The absence of a joint-Service medical planning presence is especially noted at critical subordinate units of the unified commands. All joint and combined commands require medical planning representation from all Services.

DISCUSSION: Currently there is no overall system to identify officers experienced in the joint medical planning career field. There is also no formal career path to "grow" planners through education, training, professional development and equal advancement opportunities.

The need for the establishment of a sub-specialty code for medical planners and a valid career path has been noted repeatedly. This career path and the sub-specialty code are the result of a recognized need for professional career medical department officers involved in the many aspects of medical operational and contingency planning, mobilization preparedness and medical

intelligence. Planners are presently identified only by previous assignments, professional reputation, and, where they exist, Service specific designators.

Numerous billets have been identified as requiring qualified Medical Planners. They are located throughout the administrative and operational chains of command within the DoD. Additional billets have been identified as required by various senior staff and joint commands where billets presently do not exist. A joint medical planning presence is needed to provide oversight, validation, and inter-service coordination of service medical mobilization plans and theater assets.

**OBJECTIVE:**

Ensure an inventory of qualified joint medical planners.

**TASKS:**

- a. Establish requirement for a Medical Plans and Operations career path.
- b. Identify and code billets requiring qualified Medical Planners.
- c. Identify and validate Joint Service Officer coded positions for medical planners.
- d. Ensure prerequisite training prior to assignment.
- e. Ensure equal advancement opportunities for planning specialists.
- f. Initiate participation in the DoD Personnel Exchange Program (PEP) at joint and combined commands.

**PRIMARY ACTION OFFICES:**

- a. The Services
- b. The Services
- c. OASD(HA)
- d. The Services
- e. The Services
- f. The Services

# ACTION PLAN

**CATEGORY:** Requirements, Capabilities, and Assessment

**ACTION ITEM #:** 4

**SUBJECT:** 2<sup>nd</sup> thru 5<sup>th</sup> Echelon and Medical Planning Execution System (MEPES) Planning Factors

**BACKGROUND:** The Medical Planning Module (MPM)/MEPES uses numerous planning factors/ tables provided by the Services. Many are roll-overs from MPM, and haven't been revalidated since MPM was first developed. MPM/MEPES currently develops requirements based on hospital admissions. 1<sup>st</sup>/2<sup>nd</sup> echelon requirements are currently built by the Services using allocation rules. By definition, hospital admissions do not occur at 2<sup>nd</sup> echelon. There are no 2<sup>nd</sup> echelon workload based planning factors in the MPM. The Time, Task, Treater clinical data base developed by Defense Medical Standardization Board (DMSB) currently only provides 3<sup>rd</sup>/4<sup>th</sup> echelon data for developing planning factors for requirements generation. 5<sup>th</sup> echelon is considered as CONUS. MPM calculates CONUS (OPZONE 3) requirements using the same planning factors used for in-theater care.

**DISCUSSION:** 2<sup>nd</sup> thru 5<sup>th</sup> Echelon unique planning factors are required to give MEPES the capability to develop medical requirements for 2<sup>nd</sup>/5<sup>th</sup> echelons. The planning factors for 2<sup>nd</sup>/3<sup>rd</sup>/4<sup>th</sup>/5<sup>th</sup> echelon need to be based on the DEPMEDS Time, Task, Treater clinical data base. There is a need to re-exam all of the underlying planning factors contained in MPM/MEPES.

**OBJECTIVE:** Establish planning factors for 2<sup>nd</sup> thru 5<sup>th</sup> echelon based on the Time, Task, Treater clinical data base. Validate all MEPES planning factors annually.

**TASKS:**

- a. Develop 2<sup>nd</sup> thru 5<sup>th</sup> Echelon and MEPES Planning Factors
- b. Validate all MEPES planning factors, annually.



PRIMARY ACTION OFFICES:

- a. DMSB / The Services
- b. Joint Staff, J-4 Medical Readiness Division (MRD) /  
The Services

# ACTION PLAN

**CATEGORY:** Requirements, Capabilities, and Assessment

**ACTION ITEM #:** 5

**SUBJECT:** Medical Capabilities and Requirements Information Resources

**BACKGROUND:** Goldwater-Nichols amended Title 10, US Code to assign authority, direction, and control for the conduct of operations to the combatant commanders (CINCs). Since the Act became law, CINCs have played a greater role in requirements definition and analysis, including exercising greater influence over Service programming and budgeting in support of CINC requirements. Downsizing, reduction in forward deployed force structure, and the concomitant reliance on strategic lift leading up to execution have all demanded greater attention to balancing capabilities against requirements. Every economy must be applied to deliberate and crisis planning; and to programming. To that end, CINCs and Services will rely more heavily upon capability-based planning and modeling to refine requirements against capabilities.

**DISCUSSION:** Medical support planning, according to Joint Pub 5-03.2 (Joint Operation Planning and Execution System), Annex Q (Medical Support Planning) is the process that quantifies the level at which the medical system can support the CINC. Data relative to beds by specialty, personnel (including critical and non critical support personnel), training, material stockage levels, blood, inter and intra theater aeromedical evacuation, preventive medicine and command/control are assessed as "fill" levels in 100% bar charts. Detailed shortfall reports and workarounds are assimilated into operations plans. There is currently no requirement to balance capabilities and performance factors against 100% fill levels. The requirement exists to develop a criteria for measuring performance characteristics in conjunction with capability planning. CINC requirements for information resources would be based on time-phased

requirements for planning, programming, and/or execution.

**OBJECTIVE:**

Develop a mechanism to assess requirements and capabilities for combatant commanders, Services, and the Joint Staff.

**TASKS:**

- a. Define medical capability.
- b. Develop capability measurement(s).
- c. Develop and validate modifications to the MEPES as the integration suite for both requirements calculations and capabilities data storage, retrieval, management and course of action analysis to manage and assimilate measures of effectiveness.
  - (1) Identify development level of effort/funding required.
  - (2) Allocate funding for MEPES enhancement.
  - (3) Develop and execute MEPES capabilities data enhancement contract.
- d. Develop additional Information Resource Management (IRM) requirements. Collect, process, and display status information to include requirements and capabilities regarding: command, control, communications and intelligence (C<sup>3</sup>I), preventive medicine (PM), major health service assemblages (to include beds by type and operating rooms), personnel, training, class VIIIA and VIIIB, and tactical/strategic aeromedical evacuation.
- e. Ensure requirements and capabilities data and their associated effectiveness measures are compatible.
- f. Merge capabilities and requirements-based planning.

**PRIMARY ACTION OFFICES:** Joint Staff, J-4 MRD /  
OASD(HA) /  
The Services

## ACTION PLAN

**CATEGORY:** Requirements, Capabilities, and Assessment

**ACTION ITEM #:** 6

**SUBJECT:** Casualty Rate Development Compilation and Application Methodology

**BACKGROUND:** The MPM is the existing tool for determining wartime health services requirements. Accurate casualty rates are needed to generate valid wartime health services requirements. Currently, casualty rates are often misapplied. As a result, the need for medical resources may be over or underestimated.

**DISCUSSION:** JOPES MPM default rates were developed by early force-on-force combat analysis and historical review assessing US versus Soviet and Warsaw Pact forces in Europe, US versus Soviet forces in southwest Asia, and US/South Korean forces versus Chinese/North Korean forces in Korea. The lack of an audit trail makes it impossible to determine the size of force these rates should be applied to the appropriate personnel mix (combat/support), or the relevant time increment for these data (day, week, month). The only guidance provided is the MPM user's manual which gives definitions of light, moderate, heavy, and intense levels of combat. The Disease Non-Battle Injury (DNBI) rates used are generally updated semiannually and published in Service planning documents. The size of force, operational environment, and time increments over which planning factors may be reasonably applied are not addressed. As with wounded in action rates, users receive little or no education on the application of DNBI rates.

**OBJECTIVE:** Develop a methodology appropriate for each Service to ensure a match of casualty rate development and application across the full range of operational situations.

**TASKS:**

- a. Identify the situational factors that affect planning rates and organize these factors into a decision tree. This tree should be designed to allow each type of operational

situation that can be defined with the factors identified to be quickly and uniquely located.

b. Conduct the research and development needed to generate, from available illness and injury data, the casualty rates for each type of operational situation.

c. Modify the Personnel Loss Generator (PLG) in MEPES to accept the casualty rate sets specified by situational factors.

PRIMARY ACTION OFFICES:

- a. Joint Staff, J1 / The Services
- b. Joint Staff, J4 MRD / The Services
- c. The Services

## ACTION PLAN

CATEGORY: Requirements, Capabilities, and Assessment

ACTION ITEM #: 7

SUBJECT: Incorporate Medical Participation into Wargaming Models and Simulations

BACKGROUND: During the Defense drawdown, it is necessary for the Services to place greater reliance on modeling and simulations to determine requirements. Because medical requirements are linked to combat operations, and because medical must compete with the line for resources such as lift, medical factors should be integrated into wargaming models.

DISCUSSION: DoD has adopted a strategy of using distributed interactive modeling to establish requirements and to train personnel. Adding medical participation to wargaming models would allow casualties generated by such exercises to be fed directly into medical requirements generators. This would ensure that the casualty estimates parallel the planned combat operation. At the same time the medical requirement for resources such as lift and communications would be accounted for by the war fighters during their wargame. Also, the effects of DNBI, nuclear, chemical agents, and biological agents need to be added to the wargaming models thereby creating casualties and interference that does not currently exist in the models. This would provide a more realistic exercise for the war fighters and would make them more aware of the need to coordinate with medical personnel.

OBJECTIVE: Add medical requirements to all wargaming activities and develop interfaces between wargaming tools and existing/future medical models.

TASKS:

- a. Identify medical wargaming models, and develop interface with war games.

- b. Add known medical effects into all wargaming models.
- c. Conduct the research and development needed to model the medical effects of service or operation unique factors.

**PRIMARY ACTION OFFICES:**

- a. Joint Staff, J4 MRD
- b. Defense Modeling and Simulation Office (DMSO)
- c. The Services

## ACTION PLAN

<u>CATEGORY:</u>	Requirements, Capabilities, and Assessment
<u>ACTION ITEM #:</u>	8
<u>SUBJECT:</u>	Patient Stream Specification
<u>BACKGROUND:</u>	<p>A key component of medical models used to establish requirements is the Time, Task, Treater data base. This file allows patient conditions (PC) to be linked to the appropriate treatment so that data on patient load can be converted to projections of the medical resources required. It is essential that the set of PCs be comprehensive and that the rate of occurrence of each condition be accurate to achieve valid projections of medical resources.</p>
<u>DISCUSSION:</u>	<p>The development of the Time, Task, Treater data base started with the treatment information for a relatively small number of PCs. Over time new categories have been added to cover conditions that require equipment that was not required by the previously defined conditions. This process, however, has resulted in a set of categories that are not connected to the diagnostic codes used in military medical records. Therefore, a clear audit trail from medical data to rate estimates for the current PC cannot be established. Efforts to link the International Classification of Diseases ninth revision (ICD-9) codes used in the Composite Health Care System (CHCS) with the PC codes has revealed that many diagnoses are not covered by any PC code. In addition, when computing rates it is important to specify the type of patients that are to be considered. Separate rates are needed for echelon 2 thru echelon 5 levels of care.</p>
<u>OBJECTIVE:</u>	<p>Develop a method for linking real world patient load data with modern patient condition codes enabling planners to forecast medical workload and resource requirements.</p>
<u>TASKS:</u>	<p>a. Combine ICD-9 codes which have equivalent medical resource requirements.</p>



- b. Develop a system that allows PC codes to be defined in terms of aggregate ICD-9 codes, measures of severity, and other data available in medical records.
- c. Define appropriate terms (e.g., "admissions" and "presentations") in terms of measurable variables.
- d. Develop a new PC code and the associated Time, Task, Treater data base. Ensure Time, Task, Treater data base is provided for each PC code.

**PRIMARY ACTION OFFICES:**

- a. DMSB
- b. OASD(HA)
- c. OASD(HA)
- d. DMSB

## ACTION PLAN

CATEGORY: Requirements, Capabilities, and Assessment

ACTION ITEM #: 9

SUBJECT: Event Timing and Roles in the Planning, Programming, and Budgeting System (PPBS)

BACKGROUND: The DoD Inspector General (DoDIG) in their Inspection Report 93-INS-12, of 30 Sep 93, found that Program Objective Memorandum (POM) submissions are often based on a "roll-over" of historical data from a previous submission without benefit of validated analytical process. The underlying cause of this situation is rooted in the current business practice of POM development. The "as is" practice fails to produce Illustrative Planning Scenarios (IPS) and guidance in sufficient time to allow a reasonable opportunity for wargame analysis. The nature of the combat concept of military operations has a significant effect upon support requirements. The "war fight" analysis must occur prior to medical support requirements calculation to provide input to requirements calculation tools. There is an additional problem associated with the POM development process not addressed by the DoDIG report. Title 10 of US Code as amended by the Goldwater-Nichols Act assigns the responsibility for requirements determination to the unified commands. The Joint Staff and Services are still performing wargame analysis and requirements calculation with limited to no involvement by the unified command and its Components until near end product POM review. The result is war game concepts of operations which are viewed as unrealistic by the operational commands.

DISCUSSION: There must be a re-engineering of the POM development process to allow adequate time for war game analysis and requirements calculation/validation and CINC/Component involvement in the process. Operations planning procedures and tools should be applied to the POM process to ensure appropriate CINC involvement and influence; and guidance/scenarios must be available early in the cycle to allow analysis. The medical

functional area cannot, by itself, affect this change. It must be done as a matter of DoD-wide policy.

**OBJECTIVE:**

Re-engineer the POM development process to allow time for appropriate CINC input, and time to calculate and validate medical requirements in support of the Illustrative Planning Scenarios.

**TASKS:**

Identify the problem and recommended solutions to the Secretary of Defense (SECDEF).

**PRIMARY ACTION OFFICE:** Office of the Director, Program Analysis and Evaluation (OD(PA&E))

# ACTION PLAN

**CATEGORY:** Command, Control, Communications, Computers, and Information Management

**ACTION ITEM #:** 10

**SUBJECT:** Communications Interoperability and Integration

**BACKGROUND:** The ability to communicate in a timely and reliable fashion has always been a source of frustration to medical units. All recent operations and contingencies continue to confirm the need for better medical communications support. Medical communications problems are not just between Services but also between functional areas within the Services. For example, during Operations DESERT SHIELD/DESERT STORM (ODS) Army medical evacuation (MEDEVAC) helicopters were unable to communicate with their own receiving hospitals as well as the Navy hospital ships.

**DISCUSSION:** Communications provides the links to establish an integrated theater health services support continuum. Communications should be seamless, assured, and available.

*Communications* can be defined as voice, text, data, video, and global positioning.

*Assured* means:

- If one means of communication fails another is available and will work with no degradation of capability.
- Multi-level security capability so if the CINC decides to classify medical information for operational reasons, it can be quickly and easily classified.

*Available* is defined as on hand when needed in required quantities.

**OBJECTIVE:** Ensure the medical structure has a robust, seamless, and

assured communications capability within the global communications architecture.

**TASKS:**

- a. Consolidate CINC and Service defined medical communications requirements to ensure interoperability and tailor them to fit with the global communications architecture.
- b. Develop an acquisition strategy to integrate the communications capability for the medical structure within the global communications architecture.
- c. Publish guidance for communications planning and security classification in joint publications.
- d. Verify establishment of training for joint medical communications planning and unit level communications operations.
- e. As part of the acquisition process ensure advanced technologies can be easily inserted.

**PRIMARY ACTION OFFICES:**

- a. Joint Staff
- b. OASD(HA) / Defense Acquisition Executive
- c. Joint Staff
- d. Joint Staff
- e. DMSO

## ACTION PLAN

**CATEGORY:** Command, Control Communications, Computers and Information Management

**ACTION ITEM #:** 11

**SUBJECT:** Medical Element of the Global Command and Control System (GCCS)

**BACKGROUND:** Numerous reports from ODS are the latest confirmation of the continuing requirement for fully integrated information and assured communications throughout all functional areas. Medical command and control requirements are no exception. Loss of life and diminished personnel accountability are more probable without proper Service, Joint, and Combined communications connectivity. In addition to voice communications, data and video communications links that permit dynamic distributed collaborative medical support planning are vital.

**DISCUSSION:** In 1986, the ASD(HA) directed the use of the MPM to calculate workload based requirements, as an aid to PPBS resource allocation decisions. Following the 1991 termination of the JOPES modernization program under WAM (i.e., WWMCCS ADP Modernization), additional justification in support of MPM replacement enhancements gave rise to MEPES.

**OBJECTIVES:** In accordance with the Command, Control, Communications, Computers, and Intelligence for the Warrior (C<sup>4</sup>IFTW) concept, consolidate medical command and control (C<sup>2</sup>) requirements into a single interoperable capability to be part of the GCCS.

**TASKS:**

- a. Integrate MEPES into the GCCS in accordance with the C<sup>4</sup>IFTW concept. Adopt and conform MEPES and all other medical C<sup>2</sup> systems to Defense Information Systems Agency (DISA) GCCS worldwide implementation standards supporting Common Open Systems Environment (COSE) protocols and Common Desktop Environment (CDE) programming requirements.

Provide migration plan and implementation plan for all medical C<sup>2</sup> systems to the Assistant Secretary of Defense for Command, Control, Communications, and Intelligence [ASD(C<sup>3</sup>I)] for approval in accordance with 10 USC 8023. This is applicable to all aspects of medical readiness planning, programming, and execution support for C<sup>2</sup> development efforts.

b. Support development and funding for fielding the MEPES capability within GCCS (July 1994). Develop, test, and field the core functionality of MEPES (October 1994). Automated functionality should include: population at risk (PAR) definition from Time-Phased Force and Deployment Data (TPFDD) and/or combat simulation models; deterministic and/or stochastic calculation of casualty and patient streams (starting at the third echelon hospital admission level) via rate application and/or combat simulation model output; contingency support requirements calculation to include beds by type, a full set of personnel requirements for each Service, class VIIIA and class VIIIB resupply, and evacuees/evacuation resources; generation of unit and non-unit TPFDD requirements records; supportable evacuation policy analysis; compilation of losses for use by the personnel planning community.

c. Coordinate with CINCs, the requirement for a fully integrated Communications Operational Requirements Generator and Feasibility Estimator. This new requirement is essential to the development of realistic, quantifiable, and auditable communications requirements.

d. Research and support ongoing initiatives to develop a planning anchor desk utilizing distributed collaborative planning tools. Requirements focus on medical/line interfaces for plan development, movements and transportation feasibility, rapid (on-line) course of action analysis, Dynamic Analysis and Replanning Tools (DART), and other cross-functional planning tools for medical requirements [e.g., U.S. Transportation Command (USTRANSCOM) Regulating and Command/Control Evacuation System (TRAC<sup>2</sup>ES)].

- e. Research advanced information technology initiatives to enhance planning, exercising, modeling and simulation.

**PRIMARY ACTION OFFICES:**

- a. Joint Staff, J-4, J-6 /  
Defense Information Systems Agency (DISA)
- b. Joint Staff, J-4, J-3, J-6
- c. Joint Staff, J-4
- d. Joint Staff, J-4
- e. Joint Staff, J-8, J-4, J-6



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## ACTION PLAN

**CATEGORY:** Command, Control, Communications, Computers, and Information Management

**ACTION ITEM #:** 12

**SUBJECT:** Total Asset Visibility

**BACKGROUND:** USTRANSCOM is tasked by DoD Directive 5154.6 to establish the global Command and Control (C<sup>2</sup>) system - called TRAC<sup>2</sup>ES - for patient movement integrating the separate processes and theaters as well as offering decentralized control to supported CINCs and by-name patient In-Transit Visibility (ITV) in both peace and war.

TRAC<sup>2</sup>ES, the software "tool", will be centralized on one large capable computer in each theater. Forward and rear hospitals and Aerial Ports of Embarkation (APOEs)/Aerial Ports of Debarkation (APODs) will then communicate with the closest TRAC<sup>2</sup>ES tool using a small algorithm on a multi-use desktop computer. An updatable capability for individually-carried data storage devices is required to "fuel" TRAC<sup>2</sup>ES.

The ASD(C<sup>3</sup>I) leads DoD's development efforts for an individually carried data storage device. The April 1992 Information Technology Policy Board established a configuration for a Multi-technology Automated Reader Card (MARC) prototype. The Joint Staff has been involved with preliminary efforts to identify functional requirements and evaluate prototype technologies.

J-4/MRD will participate in efforts by agencies responsible for developing an individually carried data storage device in evaluation of emerging technologies and prototypes.

**DISCUSSION:** Given the uncertainties of contingency operations, redundant mechanisms are necessary to ensure information continuity. An individually carried data storage device is a necessary information tool to enhance continuity of information flow. It will serve as the gateway and data source for individual patient

information within the Theater Medical Information System (TMIS) allowing total patient by-name in-transit visibility. Such a device is also seen as a significant contribution to beneficiary care business process improvement. Considerable patient administration time savings may be realized via the device as well as improved availability of key medical history data.

**OBJECTIVES:**

Satisfy the validated requirement for an up datable individually carried data storage device with read/write capability.

**TASKS:**

a. Identify medical functional requirements for individually carried data storage device prototype to ASD(C<sup>3</sup>I). Preliminary medical functional requirements identified to date are substantive. All validated requirements must be provided to assure allocation of adequate storage space on the device.

b. Support continued cross functional requirements for up datable media. Conduct evaluation of field medical applications of the individually carried data storage device as a part of ASD(C<sup>3</sup>I) prototype testing. Field evaluation is necessary to demonstrate proof of principle, investigate prototype reliability, refine requirements, and define viable alternatives within the Theater Medical Information System Functional Economic Analysis.

c. Coordinate DoD, Service, and commercial initiatives regarding individually carried data storage devices for health information. Device must be available commercially off-the-shelf. The Military Support to Civil Authorities mission calls for interoperability between devices used in civil and military sectors.

d. Conduct individually carried data storage device proof of principle field test and evaluation. If, based on test and evaluation results, the decision is made to field the system, the migration and implementation plans shall be forwarded to ASD(C<sup>3</sup>I) for approval in accordance with 10 USC 8023.

**PRIMARY ACTION OFFICE:** Joint Staff, J-4 - MRD / OASD(HA), MFIM

## ACTION PLAN

**CATEGORY:** Command, Control, Communications, Computers and Information Management

**ACTION ITEM #:** 13

**SUBJECT:** Information Management

**BACKGROUND:** Information system shortfalls in the medical support functional area have been consistently documented in post action reports for the past 130 years. Unit, component command, U.S. Central Command (USCENTCOM), General Accounting Office (GAO), and DoDIG reports from ODS are the latest confirmation of continued integrated information and communications needs throughout the medical functional area.

**DISCUSSION:** An information management system should be developed within DoD Corporate Information Management (CIM) standards and policies to ensure integration, interoperability, common user interface, assured standard communications infrastructure (common user network), and data standardization. To date, considerable requirements definition has been completed toward satisfaction of this requirement. The TMIS initiative seeks a seamless, integrated family of systems serving beneficiary care and contingency support across the entire operational continuum. Users of automated information systems aiding beneficiary care must be able to easily employ contingency support hardware and software without undo additional training. Continuity of patient care is dependent on the continuity of individual patient care information across multiple echelons. Given the uncertainty and multiple variables of contingency operations, redundant mechanisms may be necessary to ensure information continuity. An individually carried data storage device is a necessary information mechanism to enhance continuity of information flow. The OASD(HA) Office of Medical Functional Integration Management (MFIM) will be responsible for functional integration and Service interoperability. Decentralized development of components

satisfying unique requirements shall be compliant with DoD TMIS standards. The Defense Medical System Support Center (DMSSC) will be responsible for technical integration and development of sub-systems and interfaces.

**OBJECTIVE:**

Satisfy the validated requirement for a seamless medical information system serving contingency support and beneficiary care across all echelons.

**TASKS:**

a. Continue to pursue the development of TMIS serving contingency support and beneficiary care across all echelons.

b. Complete TMIS functional requirements.

(1) Define the requirements.

(2) Determine what other systems (including commercial off-the-shelf) have the same functionality.

(3) Identify migration path.

(4) Migrate.

c. Comply with DoD Major Automated Information System Review Council (MAISRC) milestone requirements.

d. Field initial operating versions of TMIS migration systems.

e. Explore medical support applications of emerging technologies.

**PRIMARY ACTION OFFICES:**

b.(4) The Services  
All other OASD(HA), MFIM

# ACTION PLAN

CATEGORY: Logistics

ACTION ITEM #: 14

SUBJECT: Deployment and Sustainment

BACKGROUND: Deployment and Sustainment support involves getting both medical and non-medical materiel to the operational user level and maintaining those assets through the product/program life cycle. All medical materiel supporting the fighting force, especially dated and deteriorative or short shelf life items, must be integrated with support plans provided to ensure timely deployment of assets and theater capability. In addition, those items that are not readily available in the commercial market place must be identified and supported to ensure prompt availability.

DISCUSSION: The Department's changing peacetime medical logistics practices such as Prime Vendor support and Just-In-Time inventories are fast eroding the capability to support operations from the traditional Defense Logistics Agency (DLA) depot inventories. It is critical that new business practices be explored that focus on rapid access into the commercial medical logistics base. The exploration of these new practices must be accompanied by new approaches to assessing support capabilities. The capabilities purchased from the domestic base need to be quantified and included in the capability assessments. "Military unique" medical items and those items that are not plentiful in the commercial medical logistics base must be identified through Industrial Preparedness Planning (IPP), acquisition and materiel management strategies, and industrial preparedness measures applied to insure the availability of critical medical materiel.

OBJECTIVE: Develop and update acquisition and support plans that support the full spectrum of military operations.

TASKS: a. Identify the medical material requirement:

- (1) Develop planning guidance which allows for the development of current, realistic, and coordinated materiel requirements.
  - (2) Compute total War Reserve (WR) requirement based on guidance developed in a., above, and pass to DLA.
  - (3) Examine requirements determination process in order to develop improved quad-service time-phased WR requirements.
- b. Change current medical readiness process to reflect the changes in the medical logistics environment.
- (1) Develop a medical readiness business plan that improves the process of integrating the results of IPP to accomplish the following:
    - (a) Match Service developed requirements with offsetting DLA and Service inventories and purchased capabilities;
    - (b) Assess the commercial availability of materiel not offset by inventories or purchased capability;
    - (c) Identify the resulting "military unique" or "military intensive" items which cannot be supported by the Industrial Base and for which substitute materiel or alternative treatments are not available.
  - (2) Improve processes for cross referencing National Stock Numbers (NSN) with industry standard numbering systems.
- c. Develop programs which support Initial Issue and WR needs while at the same time minimize the Department's investment in dated and deteriorative inventories.

- (1) Identify and resource the dated and deteriorative items in support of early deploying forces.
- (2) Develop and resource consignment contracts for initial load requirements to support contingency deployments at specific Service determined activities.
- (3) Institute Prime Vendor program support for sustainment of operations and to also support some initial fielding/deployment requirements.
- (4) Establish "End Item/Product Line Specific" Decentralized Blanket Purchase Agreements (DBPAs) for consumables and spare parts required for sustained operations.
- (5) Develop rotational contracts for "military intensive" items which cannot be supported by the industrial base.
- (6) Develop industrial preparedness measures and maintenance contracts to support critical medical items and preserve defense essential capability if endangered.
- (7) Develop contracts for disposal of expired materiel that may originate within the US or may be returned from OCONUS.
- (8) Continue and expand the existing shelf-life extension programs.
- (9) Initiate a program to continuously explore the capabilities of rapidly evolving medical technologies and to evaluate their potential for application in casualty care. Exploit telemedicine and rapidly developing advanced medical technologies for casualty care that add value to the health care delivery system through a "Rapid Prototyping Methodology."



PRIMARY ACTION OFFICES:

- a.(1) Joint Staff
- a.(2) DMSB / The Services
- a.(3) DMSB / The Services
- b. DLA
- c.(1) The Services
- c.(2) thru (7) DLA / The Services
- c.(8) The Services / DMSB
- c.(9) Army

# ACTION PLAN

CATEGORY:

Logistics

ACTION ITEM #:

15

SUBJECT:

Totally Equipping the Force

BACKGROUND:

Totally equipping the force means:

- getting the right medical and non-medical materiel to the operational user level;
- integrating medical materiel supporting the fighting force with support materiel necessary to conduct routine medical operations (e.g., utility support, messing, quartering, transportation, and personnel support);
- sustaining and modernizing all medical and non-medical assets critical to supporting operationally deployed forces.

DISCUSSION:

Deployable Medical Systems (DEPMEDS) hospitals must be sustained and modernized through the systematic identification of needed upgrades in both equipment and consumable supplies. The deployability and mobility of DEPMEDS must be improved by reducing the weight and cube without degrading combat casualty care capabilities. As assemblages and Sets, Kits, and Outfits (SKO) are modernized, these changes must be introduced across the medical force structure systematically.

OBJECTIVE:

Ensure that DEPMEDS, other medical assemblages, medical SKOs, and non-medical material are maintained, refurbished, and modernized in a timely manner to provide quality medical care, and capability to support operational requirements.

TASKS:

a. DEPMEDS:

- (1) Improve the deployability and mobility of DEPMEDS through a resourced plan to reduce the weight and cube.

(2) Develop and resource process to update medical capability and incorporate new technology required for field support.

(3) Develop and resource storage plans for DEPMEDS which support changing scenarios in DPG.

(4) Develop and resource retrograde, rebuild, reconstitution plans to meet new operational taskings. Rebuild/refurbish at a minimum of every five years.

(5) Maintain equipment and stocks of supplies at levels compatible with unit/assembly tasking.

(6) Maintain approved changes to the DEPMEDS data base in a timely manner.

b. Non-hospital assemblies (i.e., echelon 1 and 2, and other non-DEPMEDS assemblies):

(1) Develop a process for review of all assemblies and SKOs used to support echelon 1 and 2 and perform unique medical missions.

(2) Develop processes and procedures to maintain and update various assemblies with routine changes necessitated by non-availability of current components.

(3) Develop and resource plans to refurbish, retrofit, and/or reconstitute non-hospital assemblies on a cyclic basis not to exceed five years.

(4) Maintain equipment and stocks of supplies and repair parts at levels compatible with unit and assembly tasking.

(5) Develop augmentation sets that can be applied to DEPMEDS and non-hospital medical assemblies to support Operations Other Than War (OOTW). Consolidate Service unique

assemblages to meet new missions defined in Defense Guidance.

(6) Develop Defense Guidance for mission tasking and funding of pre-positioned sets maintained for OOTW.

c. Integrate the hospital ships and the Casualty Receiving and Treatment Ship (CRTS) platforms into the DEPMEDS standardization process. Develop and resource process to update medical capability to support changing missions and incorporate new technology required.

d. Non-medical items (e.g., such as power generation, mobility, patient evacuation, and communications equipment):

(1) Modernize assets continuously to ensure new capability is added to meet new or changing operational requirements, or to incorporate new technology.

(2) Develop retrograde, rebuild, and reconstitution plans to ensure assets are properly maintained and/or retrofitted following deployment, to meet new operational taskings.

(3) Maintain non-medical equipment and stocks of supplies and repair parts at levels compatible with mission tasking.

**PRIMARY ACTION OFFICES:**

a.(1) and (2)	The Services / DMSB
a.(3)	The Services
a.(4) and (5)	The Services / DLA
a.(6)	DMSB
b.(1), (2) and (5)	DMSB / The Services
b.(3) and (4)	The Services / DLA
b.(6)	Joint Staff
c.	Navy / DMSB
d.	The Services

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## ACTION PLAN

**CATEGORY:** Logistics

**ACTION ITEM #:** 16

**SUBJECT:** Logistics Support Systems and Communications

**BACKGROUND:** The difficulties communicating medical logistics data during ODS centered on two primary aspects:

- inadequate communication links;
- lack of interoperability between the Services medical logistics information management systems.

File compatibility issues prevented effective exchange of data even when disk to disk transfers were attempted.

**DISCUSSION:** Current medical logistics doctrine calls for the establishment of Single Integrated Medical Logistics Management (SIMLM) systems in support of operational plans. In order to effectively manage SIMLM operations, the automated medical logistics support systems need to be interoperable and communications support available to allow the timely transmission of medical logistics data.

CENTCOM has prototyped the Quad Service Satellite Transmission and Receiving System - Medical Supply Support (QSTARS-MS<sup>2</sup>) system and procedures based on Defense Automated Addressing System (DAAS) and satellite communications, which allow interoperability between the various Service medical logistics systems. This prototype system needs to be adopted, and the associated equipment requirements resourced by the Services, as the near term solution to interoperability.

The long term solution to interoperability includes the development of Defense Medical Logistics Standard System (DMLSS). DMLSS will provide a single medical logistics system for use by all Services in both peacetime and wartime. DMLSS will serve as the medical logistics component of TMIS.

**OBJECTIVE:**

Provide medical logistics information management systems and communication systems which allow the transmission and exchange of logistics data within a theater of operations, and with the supporting base (i.e., COMMZ or CONUS).

**TASKS:**

a. Incorporate and resource the QSTARS-MS<sup>2</sup> communications system as a short term (i.e., five year) interim support structure.

(1) Publish the procedures for employing this method of medical logistics interoperability in Joint Pub 4-02.1, "Health Services Support Logistics in Joint Operations."

(2) Incorporate the QSTARS-MS<sup>2</sup> procedures in the medical annexes to OPLANs and contingency plans.

(3) Resource and field International Maritime Satellite/DAASO Automated Message Exchange System (INMARSAT/DAMES) or INMARSAT/Streamlined Alternative Logistics Transmission System (SALTS) capable communications systems for early deploying medical forces. At a minimum, field to Army's medical logistics battalions.

b. In the short-term, develop and resource a cataloging product (e.g., Commercial Product Classification System, the Price and Product Classification system, and Medical Electronic Customer Assistance) which will provide unit level users the capability to cross reference commercial part/product numbers, and/or generic descriptions with NSNs. Demonstrate capability and field using CD-ROM or similar technology e.g., Medical Catalog - Expanded (MEDCAT-X).

c. Develop and field a long term single medical logistics information management support system with world-wide and local user communications systems (i.e., DMLSS). Streamlined business practices, and theater functionality will be integral components of DMLSS.

(1) Resource DMLSS development and fielding.

(2) Field DMLSS to deployable medical units.

PRIMARY ACTION OFFICES:

- a.(1) Joint Staff
- a.(2) CINCs / Joint Staff
- a.(3) The Services
- b. DMSB / The Services / DLA
- c.(1) OASD(HA), MFIM, DMSSC
- c.(2) The Services



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# ACTION PLAN

CATEGORY:

Logistics

ACTION ITEM #:

17

SUBJECT:

Joint Medical Logistics Planning

BACKGROUND:

Joint medical logistics planning involves:

- identification of the materiel needed to support deployment and sustainment of medical forces;
- identification of the appropriate medical logistics structure to support joint operations; and
- assessing the medical materiel readiness of medical units and platforms.

Readiness is reported in quantitative and qualitative terms that are subject to Service, command, and activity interpretation. While quantitative reporting is fairly well defined, guidance for reporting qualitative readiness is lacking.

DISCUSSION:

The joint nature of future deployments requires joint and integrated medical logistics planning. This ranges from the development of common processes for determining requirements, and assessing medical logistics readiness, to the development of joint doctrine for medical logistics support in an operational theater.

Currently, the Services interpret OPLAN guidance separately and plan and/or execute their respective support to the combatant commands. This can lead to less than optimal application of medical materiel resources and use of support systems (i.e., transportation, pre-positioning, storage sites, etc.)

Database management of DEPMEDS, D-Day List, and medical assemblages is critical to the maintenance and upgrade of medical assets regardless of storage methodologies and frequency of retrograde. In addition to DMSB taskings, Services maintain data bases supporting mission unique and consolidated Authorized

Medical Allowance Lists (AMAL), Authorized Dental Allowance Lists (ADAL), Tables of Allowances (TA), Tables of Organization and Equipment (TOE), and Unit Assemblages (UA).

New business practices are changing the methods for transporting medical materiel overseas. Commercial air carriers now serve as the routine channel for medical resupply transportation. The Aeromedical Evacuation (AE) CRAF program continues to represent an untested method for transporting medical materiel into a theater of operations. The use of Air Mobility Command (AMC) aircraft represents a third mode of air transportation support, and maybe the only channel available during the opening stages of a conflict or contingency.

The adequacy of the joint medical logistics doctrine, and the interoperability of medical logistics support systems must be tested through realistic integration of medical logistics into joint service exercises.

**OBJECTIVES:**

Develop common baselines for computing medical materiel sustainment requirements and reporting unit or platform medical materiel readiness. Integrate this information into joint medical planning processes.

**TASKS:**

a. Readiness Reporting:

- (1) Develop a process and procedures to standardize medical readiness reporting for all Services.
- (2) Develop a listing of critical equipment items.
- (3) Incorporate the D-Day Significant Item List Risk Factor 1, essential for life support, into the qualitative process defining critical consumable items.

b. Determine areas where joint medical logistics planning can improve medical support. Areas for examination include: Combined determination of WR

requirements; combined analysis and preparation of OPLAN support input; joint operational roles for the Army's Theater Medical Materiel Management Center (TMMMC).

c. Incorporate the standardized D-Day Significant Item List items required to support military operations into the planning and support process.

- (1) Promote the use of and incorporate the D-Day list into CINC operation plans as the approved shopping guide of items capable of being supported during the first 30-60 days of contingency operations or until the wholesale system can support sustained operations. Develop procedures in the medical operations plans for approving and obtaining non D-Day item support.

- (2) Develop procedures to ensure sustainment planning by both retail and wholesale activities is based upon the D-Day List.

- (3) Develop procedures to ensure the D-Day List and the host data base is maintained and distributed in a timely manner. Determine the target level of distribution for the end product.

- (4) Develop and incorporate a formal process to ensure D-Day items and DEPMEDS standardized items form the basis of item selection for medical assemblages managed by the DMSB and/or Services.

d. Data Base Management:

- (1) Develop process and procedures for DMSB notification of approved DEPMEDS, D-Day, and Medical Assemblage changes to Services on a quarterly basis.

(2) Services develop methodologies and procedures to incorporate changes into their programs in accordance with Service retrofitting and maintenance Concept of Operations (CONOPS).

e. Transportation Planning. TRANSCOM needs to provide a detailed plan for the use of commercial air carriers, AE CRAF, AMC aircraft, and other potential assets in transporting medical materiel during contingency operations.

f. Joint Exercises. The CINCs must develop plans for including joint medical logistics support in joint exercises.

**PRIMARY ACTION OFFICES:**

- a.(1) Joint Staff
- a.(2) DMSB
- a.(3) DMSB
- b. Joint Staff / The Services
- c.(1) Joint Staff / CINCs / DLA
- c.(2) OASD(HA)
- c.(3) DMSB
- c.(4) The Services / DMSB
- d.(1) DMSB
- d.(2) The Services
- e. TRANSCOM / Joint Staff / DLA
- f. CINCs / Joint Staff

# ACTION PLAN

**CATEGORY:** Medical Evacuation

**ACTION ITEM #:** 18

**SUBJECT:** Accessibility to Reserve Component Forces for Medical Evacuation

**BACKGROUND:** A significant source of medical evacuation capability in DoD is located in the Reserve Component (RC). However, there is no system to task these forces short of presidential call-up. As a result, support from RC is limited to volunteers. While this mechanism typically results in positive response by RC members, the process is time consuming and mobilization may be delayed. Additionally, volunteer deployments may be cut short due to unit mobilization.

**DISCUSSION:** In recent years, the RC has been required to support operations short of that requiring full call-up of forces. Operationally, RC members have responded via volunteer mechanisms developed locally. RC members in volunteer status are available for limited periods. Due to limited individual availability, unit cohesion and collective effectiveness is sacrificed. Straightforward mobilization methods, accommodating limited personnel or unit requirements would alleviate or entirely eliminate this design constraint.

**OBJECTIVES:** Develop a method to ensure timely availability of selected RC personnel or units to accomplish the medical evacuation mission.

**TASKS:**

- a. Identify early deploying medical evacuation requirements by unit type.
- b. Design and evaluate alternatives to accommodate personnel availability short of 200K call-up.
- c. Determine alternatives if RC access fails to meet early deployment requirements.

PRIMARY ACTION OFFICES:

- a. Joint Staff
- b. OASD(RA)
- c. The Services

# ACTION PLAN

**CATEGORY:** Medical Evacuation

**ACTION ITEM #:** 19

**SUBJECT:** Impact of Shorter Theater Evacuation Policy on Evacuation Requirements and Capability

**BACKGROUND:** The theater evacuation policy is determined by the supported theater commander based on intensity of conflict, availability of medical resources and availability of evacuation assets. As forward medical presence and pre-positioned assets located forward are reduced, medical support for contingency operations becomes more dependent on theater casualty evacuation capability. Additionally, the increased mobility of combat forces makes medical support for fighting forces difficult, which in turn increases the need for early evacuation to rear medical facilities. These factors will increase both the number of evacuation missions and level of clinical care required enroute.

**DISCUSSION:** Responsibilities and scope of support provided by the Services must take into account shifting evacuation requirements and potential increases in workload created by planning decisions to limit the theater's medical presence. Services must plan and program for capability to support a shorter theater evacuation policy.

**OBJECTIVE:** Define patient evacuation requirements and develop enhanced medical evacuation capability that accommodates shorter theater evacuation policies by all Services.

**TASKS:**

- a. Determine future clinical and operational medical evacuation requirements for each mode of patient transportation.
- b. Evaluate current clinical and operational capability for each mode of patient transport.
- c. Identify clinical and operational shortfalls and



develop programs to meet theater medical evacuation requirements.

PRIMARY ACTION OFFICES:

- a. DMSB / The Services
- b. The Services
- c. The Services

## ACTION PLAN

CATEGORY: Medical Evacuation

ACTION ITEM #: 20

SUBJECT: CONUS Aeromedical Evacuation, Patient Reception and Distribution

BACKGROUND: Historically, casualties arriving in CONUS were channeled through east and west coast reception airfields for follow-on transport to destination facilities. Typically, CONUS assigned USAF C-9 aircraft were responsible for supporting this tasking, with augmentation support provided by aircraft of opportunity. There are recent indications that the CONUS-based C-9s will not be required to deploy, making them available for the CONUS distribution mission.

DISCUSSION: With the implementation of DoD Health Care Regionalization, designated lead agents and the Services should develop casualty reception and distribution plans for execution during contingencies. The focus should be on establishing a distribution structure that supports peacetime regional operations while having the capability of expanding for contingency support. Areas that must be considered include clinical referral patterns, specialty treatment centers and inpatient bed capacity through regional plans, and include DoD, the Department of Veterans Affairs (DVA) and National Disaster Medical System (NDMS) facilities as appropriate. Lead agents and USTRANSCOM must determine potential sources for patient transportation, and develop a support plan that accommodates a hub and spoke mechanism to provide the appropriate level of medical care intra-regionally, which will align with the requirement of transporting the casualty to home station when not clinically contraindicated.

OBJECTIVE: Develop CONUS casualty reception and distribution plans, as well as intra-regional execution methodologies.

**TASKS:**

- a. Evaluate overall regional patient reception capability and requirements.
- b. Develop region specific casualty reception plans, matching requirements to medical capability specific to each region.
- c. Evaluate patient transportation resources available in each area that could be resourced or tasked to this mission.
- d. Integrate patient regulation and transportation modes for regional execution.

**PRIMARY ACTION OFFICES:**

- a. USACOM
- b. USACOM
- c. USACOM / USTRANSCOM
- d. USTRANSCOM

# ACTION PLAN

CATEGORY: Medical Evacuation

ACTION ITEM #: 21

SUBJECT: Use of Air Versus Other Evacuation Modes

BACKGROUND: Patient evacuation is defined as the timely and efficient movement of sick or injured personnel from the site of injury or illness to appropriate MTFs. Patients not returned to duty within the theater evacuation policy are evacuated as rapidly as possible to the next echelon of medical care for further evaluation, treatment and disposition. Current DoD policy is to use air transportation as the preferred means of casualty movement, when available. Surface evacuation systems will be used to transport casualties when aeromedical evacuation is not possible or practical. In combined operations, host nation ground and sea ambulances, buses and trains may be used to evacuate U.S. casualties.

*Sea Evacuation.* The U.S. has the capability to use two designated hospital ships to evacuate casualties by sea, but lacks dedicated ambulance ships in the fleet. Similarly, there are no ships identified with a dedicated secondary role of sea evacuation in the fleet.

*Ground Evacuation.* Medical evacuation in echelon one and two is resident in combat and combat service support units. Ground evacuation support for echelons 3 to 5 is organic to units designated to providing HSS.

USTRANSCOM has undertaken initiatives to integrate patient regulating and patient movement activities into a single process that will provide global visibility of patient movement requirements, bed availability and potential patient movement resources. A product of this system is the capability of providing in-transit patient visibility throughout the patient evacuation process. This system will support patient evacuation processes at least from echelon 3 and rearward, and may be more forward as the system is developed.

**DISCUSSION:**

As a result of political changes occurring in the recent past, defense priorities and strategies have shifted toward regional scenarios and support for OOTW. These strategies have increased the need for flexible methods to support medical evacuation operations. While medical evacuation by air remains the preferred option, ground and sea evacuation may be more appropriate in some scenarios. Given the uncertainties of contingency operations, ground and sea evacuation systems must be available to immediately replace or augment the aeromedical evacuation system as required. HSS units must possess the capability to integrate into a theater-wide medical evacuation system to support patient movement requirements by all available means. Alternatives to patient transportation by air must be quantified by each Service. While air appears the logical method for strategic transportation, all transportation modes must be investigated for forward, intratheater and CONUS distribution patient transportation requirements.

**OBJECTIVE:**

Develop an integrated capability for medical evacuation that includes rotary-wing, fixed-wing, land and sea assets.

**TASKS:**

Develop strategies to integrate ground, sea, and air evacuation capabilities.

**PRIMARY ACTION OFFICE:** Joint Staff

# ACTION PLAN

CATEGORY: Medical Evacuation

ACTION ITEM #: 22

SUBJECT: Joint Use of Evacuation Assets

BACKGROUND: Currently, each Service is responsible for evacuation of their casualties from echelons 1 and 2. Emerging doctrine is dictating increased potential for joint and combined operations, and for OOTW. These roles require an increased requirement for shared taskings among the Services. Currently, the US Army is the only Service that has dedicated rotary wing ambulance capability that routinely operates in the far forward/CZ areas. It also has the only dedicated armored/tracked ground ambulances, but these assets are organic to armor and mechanized infantry units. All Services have varying numbers of ground ambulances to support health service support operations. There is no system or element in the theater [Joint Task Force (JTF) or unified command] with visibility of all evacuation assets or with the mission responsibility to oversee medical evacuation activities beyond the organic service level.

OBJECTIVES: Develop joint doctrine for the joint use of evacuation assets to include dedicated air ambulance support to Marine Corps contingency operations, and establishment of a Theater Patient Movement Requirements Center (TPMRC).

- TASKS:
- a. Develop a TPMRC CONOPS for theater consideration and implementation.
  - b. Determine joint medical evacuation support requirements.
  - c. Develop joint doctrine for joint use of evacuation assets.
  - d. Develop JTTPs to support joint medical evacuation support requirements.

- e. Enhance service medical force structures and doctrine to incorporate joint integration of assets.

**PRIMARY ACTION OFFICES:**

- a. USTRANSCOM
- b. Joint Staff
- c. Joint Staff
- d. Joint Staff
- e. The Services

## ACTION PLAN

CATEGORY: Medical Evacuation

ACTION ITEM #: 23

SUBJECT: Need for Joint Medical Transportation Doctrine

BACKGROUND: DoD Directive 5154.6 (April 29, 1993), "Armed Services Medical Regulating," states that it is DoD policy that "...the USCINCTrans shall be the single manager for the implementation of policy and the standardization of procedures and information support systems for inter-theater medical regulating. The Commanders of the geographic Unified Commands and Specified Commands shall be responsible for intratheater medical regulating...in their respective theaters." Each of the Services also has a role in medical evacuation.

Following ODS, the DoDIG Final Report on the Inspection of the Department of Defense Medical Mobilization Planning and Execution (30 Sep 93) assessed that there was a patient regulating shortfall with respect to tracking of patients within the aeromedical evacuation system (p. 156).

DISCUSSION: No single authority has been designated as the responsible agency to develop joint doctrine for the entire medical evacuation system [i.e., from the point of injury through arrival at the definitive CONUS Medical Treatment Facility (MTF)]. Such doctrine must also address the integration of regulation and patient transportation both in contingencies and in OOTW. It must oversee development of a system to designate, in advance of a contingency, specific individuals to serve as evacuation medical attendants and to insure they are properly equipped and trained.

It is essential that individual Service medical evacuation doctrine be mutually compatible and integrated to insure that medical evacuation is conducted via a single, seamless evacuation system and that interoperability problems are recognized and corrected in advance of contingency.



In addition, the medical evacuation system must provide ITV (e.g., the ability to locate and determine the condition of a patient).

DoD policy requires that the Military Services keep the next of kin informed regularly and currently of the patient's medical progress (DoDIG Report, p. 157); this can only be accomplished if the patient's location is known at all times so that his condition can be monitored. This requires use of a joint information system. The Defense Medical Regulating Information System and the Theater Army Medical Management Information System did not provide the needed in-transit visibility during ODS. DoD Directive 5154.6 gives the CINCTrans the responsibility to "...In coordination with the ASD(HA), establish a global network system to assist in the command and control of inter-theater medical regulating and aeromedical evacuation and provide the ability to locate and track Uniformed Services' patients being medically evacuated in both peace and contingency...operations." USTRANSCOM is developing TRAC<sup>2</sup>ES to provide the required ITV.

**OBJECTIVE:**

Develop joint doctrine for the entire medical evacuation system to ensure all levels of evacuation are interoperable and integrated into a seamless system and provide in-transit visibility of patients.

**TASKS:**

a. Designate a DoD Executive Agent responsible for developing joint doctrine for the entire medical evacuation system. This doctrine must include, but not be limited to,

(1) Addressing the integration of regulation and patient transportation for contingencies and OOTW.

(2) Overseeing development of a system to designate, in advance of contingency, specific individuals to serve as evacuation medical attendants and to insure they are properly equipped and trained.

- (3) Ensuring patient in-transit visibility.
- b. Continue development of the TRAC<sup>2</sup>ES capability to provide in-transit visibility for patients being evacuated.
  - (1) Develop joint information requirements which must be provided for each patient evacuated.
  - (2) Develop doctrine on which levels of the medical system require TRAC<sup>2</sup>ES availability, which should have "read only" vs. data entry capability, the interval at which patient information must be updated, and who is responsible to enter/update patient data in the system.
- c. Exercise joint medical evacuation doctrine to identify interoperability problems and other issues not solved by the joint doctrine.

**PRIMARY ACTION OFFICES:**

- a. OASD(HA)
- b. USTRANSCOM
- c. Joint Staff

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# ACTION PLAN

CATEGORY:

Medical Evacuation

ACTION ITEM #:

24

SUBJECT:

Platform Capability and Modernization

BACKGROUND:

Equipment used in medical evacuation (i.e., land, air, and sea platforms) must be interoperable, reliable, and sustainable. Modernization of ground, air, and sea systems has not kept pace with the combatant forces or with the shift of the national defense strategy to the post-Cold War era. The ability to support evacuation requirements throughout the spectrum of operations from OOTW to two nearly simultaneous Major Regional Contingencies/Conflicts (MRCs) is severely limited.

The Military Departments have not resourced and modernized Active and RC medical units at the same level of fill and priority as the combat forces. This includes intratheater, intertheater, and CONUS medical evacuation capability.

The ability to adequately support and sustain joint or combined forces is also constrained by lack of sufficient and capable interoperable platforms which can keep pace with the operational tempo of the combatant commanders executing the emerging Service doctrines.

DISCUSSION:

Modernization and/or procurement of evacuation system components is hampered by the competing priorities of support units versus combat units. For example, the Army has not modernized its aeromedical evacuation fleet in concert with the Aviation Restructure Initiative, with the outcome that there are fewer casualty evacuation aircraft available and the available ones are operationally and logistically obsolete.

Today's platforms are not sufficiently capable of supporting the goals of an evacuation system capable of evacuating the theater, providing real time patient in-transit visibility, and sustaining combat operations.

Modern systems must include the capability to provide treatment, communicate, and accept emerging technologies.

**OBJECTIVE:**

Develop and execute a program to produce and/or modernize evacuation platforms.

**TASKS:**

- a. Develop methodologies to identify theater and CONUS evacuation requirements by aircraft type and capability and to monitor operational requirements and programmed capability.
- b. Modernize Army ground and air evac assets by force package, and in concert with the Department of the Army Master Priority List.
- c. Develop methodology to identify Army ship-to-shore evacuation requirements in support of Navy hospital ship operations.
- d. Study use of sea evacuation platforms to support Navy hospital ships (T-AHs) and identify other ships which could potentially be used as sea evacuation platforms.
- e. Review the requirements for dedicated rotary wing support to the USMC.
- f. Evaluate capability and develop plan to modernize the CONUS AE fleet.
- g. Reassess and revalidate the concept of operations for C-9A use in contingency theaters of operation.
- h. Develop procedures to report on the ability of theater C-130 fleets to support intratheater AE requirements. Include consideration of the aircraft's organic capability.
- i. Develop procedures to report on the ability of designated aircraft to support intertheater AE requirements. Include consideration, where appropriate, of the aircraft's organic capability.

- j. Develop standards and procedures, to include training and exercise programs, to report on the operational readiness of CRAF shipsets.

PRIMARY ACTION OFFICES:

- a. Joint Staff
- b. Army
- c. Army / Navy
- d. Navy
- e. Navy / USMC
- f. thru j. Air Force

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# ACTION PLAN

CATEGORY: Medical Evacuation

ACTION ITEM #: 25

SUBJECT: Patient Movement Items

BACKGROUND: Equipment accompanying a patient during aeromedical evacuation needs to be operable on aircraft and readily accessible by both the evacuation system and the Service MTFs.

DISCUSSION: Service MTFs use patient movement items (PMI) which are not always interoperable with the other Services or the evacuation platforms on which patients are transported. PMI which may be used on aircraft must be certified for operation at altitude and for use on designated aircraft (e.g., plugs match outlets, tubing is sized for oxygen ports, PMI and navigational equipment do not interfere with each other).

In addition, a system does not currently exist to track, recover, maintain, and return PMI in a timely and responsive manner. Due to the lack of a PMI management system during ODS, MTF commanders were forced to decide between degrading a facility's ability, by sending a critical piece of equipment with a patient, or delaying the evacuation of the patient until additional PMI could be made available through procurement channels.

OBJECTIVE: Ensure PMI are standard and interoperable between the Services, and are operable aboard evacuation aircraft by developing a system to certify, track, maintain and recover PMI.

TASKS:

- a. Standardize end items of life support equipment and consumables required to support patient evacuation throughout the echelons of care.
- b. Develop the concept of operation for a seamless process across Services and echelons of care, to include:



theater pools, maintenance, and retrograde responsibilities, taskings and funding.

c. Identify end items, necessary consumables and supplies, and repair parts to support the equipment used in the seamless system.

d. Provide a process and procedures to integrate the aeromedical certification process between Services and agencies. Develop a concept of operation to obtain aeromedical certification of equipment necessary in patient evacuation for both fixed-wing and rotary-wing operations.

e. Provide forum and process for both operational and technical testing/evaluation of aeromedical evacuation equipment.

f. Develop a methodology to track PMI through the medical evacuation system.

**PRIMARY ACTION OFFICES:**

- a. DMSB / The Services
- b. DMSB / The Services
- c. DMSB / The Services
- d. DMSB / The Services
- e. DMSB / The Services
- f. USTRANSCOM / Air Force

# ACTION PLAN

FUNCTIONAL AREA: Medical Evacuation

ACTION ITEM #: 26

SUBJECT: Medical Evacuation Command and Control

BACKGROUND: The overall evacuation system is envisioned to operate as a single, seamless system. However, multiple Services and commands share responsibility for planning and operating different components of the system. The DoDIG noted that OPLANs have not promoted the sharing of medical assets, leading to confusion over responsibilities and exacerbation of pre-existing resource shortfalls.

C<sup>2</sup> systems have been separate, with unified commands setting patient regulating procedures and the Services setting guidelines for patient movement.

DoD Directive 5154.6 made USTRANSCOM responsible for implementing policy and standardizing procedures and Information Support Systems (ISS) for intertheater medical regulating. USTRANSCOM is also responsible for establishing a global network system to assist intertheater medical regulating and aeromedical evacuation C<sup>2</sup>, and to provide the ability to locate and track Uniformed Services evacuees. DoD Instruction 6000.11 further states that the C<sup>2</sup> system shall integrate the processes and ISS for medical regulating and for assignment of AE aircraft, medical crews, and equipment. The centralized global system shall include CONUS with the other theaters, and shall offer decentralized execution to the supported geographic unified commands.

DISCUSSION: USTRANSCOM is developing TRAC<sup>2</sup>ES, to integrate patient movement processes, link the theaters, and offer in-transit visibility. However, USTRANSCOM's responsibilities are restricted to intertheater aeromedical evacuation and C<sup>2</sup> of CONUS medical regulating. The Services operate their own C<sup>2</sup> systems to execute Service

specific missions, e.g., rotary-wing evacuation by the Army, Navy, and Marines, and fixed-wing intratheater evacuation by the Air Force. However, there is a need for interoperability between these systems, to share common information and to link C<sup>2</sup>. Identifying a lead agent for evacuation to develop guidelines and procedures could ensure system interoperability and eliminate redundancies.

Establishing joint patient movement activities to match movement and bed capabilities with requirements, both in the theaters and CONUS, may be the most logical and efficient mechanism to provide integrated patient evacuation C<sup>2</sup>, and should be investigated.

DoD regional lead agents require a mechanism to manage and assess medical capabilities, and to track and evacuate patients within their region.

**OBJECTIVE:**

Identify integrated patient transportation C<sup>2</sup> systems to ensure seamless patient transfer and maintain visibility throughout patient movement.

**TASKS:**

- a. Assess the feasibility of designating a single agent to develop patient evacuation guidelines and procedures.
- b. Integrate CONUS Regions into the patient evacuation C<sup>2</sup> system.
- c. Validate requirement for joint patient movement agencies within theaters and CONUS.
- d. Validate interoperability of proposed evacuation C<sup>2</sup> systems with existing and programmed Service/Joint communications systems.
- e. Establish a working group, either new or by expansion of an existing group, responsible for integrating and managing intra- and inter-theater issues.
- f. Evaluate proposed evacuation C<sup>2</sup> system to ensure it is the best candidate.

PRIMARY ACTION OFFICES:

- a. OASD(HA)
- b. USACOM
- c. CINCs
- d. Joint Staff, J-6
- e. Joint Staff
- f. Joint Staff, J-4 / DISA

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# ACTION PLAN

CATEGORY: Manpower and Personnel

ACTION ITEM: 27

SUBJECT: Recruiting and Retention

BACKGROUND: In the past, the wartime requirements for medical personnel, especially health care professionals, have been beyond the capabilities of the Services to obtain. This allowed the medical departments to recruit and retain any and all medical specialties. With the collapse of the Soviet Union, the wartime requirements for medical personnel are now excess to current inventory (Section 733 Study). This collapse, coupled with reductions in force structure and personnel, requires the Services to match inventory with requirements. As the Services reduce in size, the recruitment and retention of qualified medical personnel, by specialty and experience is critical. In the Active Component, recruiting and retaining wartime specialties, regardless of peacetime workload is essential. The same is true for the Reserve Components, however, statutory and geographic constraints must also be considered.

DISCUSSION: It is now necessary for the Services to accurately match wartime requirements with inventory, by specialty and grade. Several tools, such as specialty pay, recruiting bonuses, and scholarships, are currently available to assist in this task. These tools must be tailored and expanded to sustain the force. In addition, due to the demographic distribution of providers, the RC is sometimes unable to obtain needed personnel for existing vacancies in a given location. This is true even though qualified personnel in other geographic locations are obligated or willing to serve. Recruiting and retention of health care providers for the RC has been hindered by potential personal and professional hardships in the event of mobilization (e.g., malpractice tail insurance, decrease in pay when compared to private practice).

OBJECTIVE: Recruit and retain sufficient qualified Active and Reserve

medical personnel to meet military medical requirements by specialty and grade.

**TASKS:**

a. Continue to program and resource scholarships and other financial assistance programs to meet Service needs, both active and reserve.

(1) Provide the Services sufficient Armed Forces Health Professions Scholarships and Financial Assistance Program (AFHPSP/FAP) allocations to meet wartime needs.

(2) Ensure the Health Professions Loan Repayment Program and the Stipend Program are resourced and structured to meet wartime requirements.

(3) Explore the expansion of AFHPSP/FAP to the RC.

b. Provide financial incentive programs (Special Pays/Bonuses) that meet the recruiting and retention needs of the Services.

c. Assign statutorily and/or contractually obligated personnel to unit vacancies, regardless of geographic boundaries. This action may require the establishment or expansion of Personnel Augmentation Detachments, and will have funding implications for travel and training.

d. Publicize the program that was developed and enacted that will grant reserve personnel malpractice/tort liability relief in the event of mobilization (Public Law 102-12).

e. Develop "Business Protection Plans" for RC independent and group practitioners (as well as other self-employed RC personnel).

**PRIMARY ACTION OFFICES:**

- a. & b. OUSD(P&R) / The Services
- c. & d. The Services
- e. OASD(RA)

## ACTION PLAN

**CATEGORY:** Manpower and Personnel

**ACTION ITEM #:** 28

**SUBJECT:** Development of Standard Processes to Monitor and Ensure Deployability of Personnel

**BACKGROUND:** Deployability requires a unique combination of medical and personnel qualifications to be identified, verified and clinically supported prior to deployment. GAO, DoDIG, and the Services' studies concerning problems with deployability continue to surface distinct disconnects in capabilities versus requirements. These reports determined significant numbers of personnel were not physically qualified or adequately trained. Medical readiness support requirements for all Services/Components, including periodic physical/dental examinations, immunizations, optical examinations and appliances, were not consistently met prior to deployment, further degrading medical readiness capabilities. These reports highlight shortcomings in the ability to verify clinical capabilities and specialty qualifications of both officer and enlisted health care providers. This hampers the ability to align providers with appropriate billets.

**DISCUSSION:** Significant numbers of personnel are not medically cleared for mobilization or deployment. Medical readiness support requirements for all Services/Components include: periodic physical and dental examinations, immunizations, HIV screening, and optical exams/appliances. No consistent system exists within or across Services/Components to provide these services during peacetime. Current studies including the Comprehensive Study of the Military Medical Care System (Section 733) and the Total Army Personnel Propensity study (draft) fail to identify RC personnel as beneficiaries even though regulations establish this status and mandate the same medical readiness support requirements for all Components. A system must be developed which provides inter-Service and cross-Component support of



these requirements and clearly identifies a funding stream for execution.

Automated personnel data system information was incomplete or out of date and resulted in unnecessary delays and inappropriate substitutions for individual medical personnel and units selected for deployment. Personnel were identified as non-deployable for numerous reasons: non current skills, medical specialty mismatches, incomplete training and unacceptable medical/physical conditions.

These deficiencies were exacerbated by the fact that senior leaders were not always aware that their commanders had not adequately reflected all deficiencies affecting mission capability. Had personnel and unit reports been accurate, some units might not have been activated, and other deficiencies could have been avoided.

The ability of all medical units to mobilize, deploy and achieve mission accomplishment is dependent upon having immediately identifiable, clinically qualified, and deployment ready health care personnel available for assignment to appropriate billets. Active duty practitioners are normally assigned to MTFs which verify their credentials and privilege them to practice a given scope of medicine. These privileges are carried over to their unit or platform of assignment upon deployment (requiring only a nominal review and re-privileging as appropriate).

While many practitioners assigned to the Guard or Reserve are credentialed and privileged to practice in a civilian facility, their civilian credentials and privileges do not carry over to their military assignment. Their Guard or Reserve unit is responsible for the credentialing and privileging process. In many cases, RC practitioners cannot practice their specialty at their unit on Inactive Duty Training periods. Consequently, prior to ODS, most were either not privileged or were only privileged at a very basic level.

RC practitioners often are "qualified" (credentialed) on paper in a wartime specialty, but practice in a sub-specialty of narrower scope, thereby limiting their utility in the wartime specialty.

Cross-Service and cross-Component verification of capabilities is difficult at best, since there is no standard criteria or management system in place. It is imperative that a single set of verified capabilities for all Services and Components be adopted and applied covering specialty qualifications, credentials, privileges and substitution guidelines. This expanded process will ensure credentialing and granting of at least provisional privileges to RC providers which are consistent with their current civilian practice privileges and the mission of the deployment billet they will occupy.

These mobilization and deployment issues applied to all Services, and were experienced by both the Active and Reserve Components.

**OBJECTIVE:**

Ensure a consistent set of medical deployability and personnel criteria is used by all Services.

**TASKS:**

- a. Ensure that minimum medical fitness standards are applied consistently across all Services.
- b. Ensure that commanders accurately report the personnel status of their units, to include deployability and ability of personnel to perform their occupational specialty and wartime/contingency mission through Status of Resources and Training System (SORTS) accountability.
- c. Establish an avenue of independent Service oversight that would review medical/personnel readiness.
- d. Develop a universally recognized set of verified capabilities applicable for all Services and Components covering: specialty qualifications, credentialing, privileging, and substitution guidelines. (not limited to physician substitution, but applicable to all levels from

senior officer to junior enlisted);

- e. Establish processes to credential and grant provisional privileges of RC providers, concurrent with their civilian practice privileges, to meet mobilization standards relative to the position/billet they will occupy.

**PRIMARY ACTION OFFICES:**

- a. OUSD(P&R)
- b. Joint Staff
- c. Joint Staff
- d. OASD(HA)
- e. OASD(HA)

## ACTION PLAN

**CATEGORY:** Manpower and Personnel

**ACTION ITEM #:** 29

**SUBJECT:** Initial Military Training for Medical Personnel

**BACKGROUND:** Not all military medical personnel were qualified for deployment during ODS, since they had not completed basic military training required by law.

**DISCUSSION:** Newly accessed officers ordinarily are scheduled to attend a basic military orientation in conjunction with appointment and assignment actions. Over the years, many have not met this requirement, going instead directly from civilian life to a duty assignment at a military MTF. When deployment taskings were levied on MTFs (or RC medical units) during ODS, some personnel were precluded from deployment pending completion of basic military training. This detracted from the readiness of the deploying organization, and required work around solutions in a fast-paced environment.

**OBJECTIVE:** Develop a program to ensure that all newly accessed Active and Reserve medical personnel attend required entry level military training within twelve months of accession.

**TASKS:**

- a. Define what constitutes basic military training for medical personnel
- b. Require all new accessions to attend basic military training as a condition of entrance to, and retention in, the military unit.

**PRIMARY ACTION OFFICES:** The Services

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## ACTION PLAN

CATEGORY: Manpower and Personnel

ACTION ITEM #: 30

SUBJECT: Graduate Medical Education (GME)

BACKGROUND: In-house GME produces most of the physician specialists in the U.S. Armed Forces. Some specialists are trained by sending active duty officers to civilian institutions. Still others train at civilian institutions in unsponsored, non active duty status. In-house GME is viewed as an excellent recruiting and retention tool by the Services and is considered the "life blood" of the Medical Corps.

DISCUSSION: The Services all operate residency training programs in their teaching medical centers. Such programs are accredited by the Accreditation Council for Graduate Medical Education (ACGME), the standard civilian accrediting organization. Programs are conducted for almost every medical specialty and range from one year (transitional year) to seven years (neurosurgery). Historically, GME outputs have been tied to requirements of the Services as determined by "peacetime" and "wartime" missions, largely that of a European conflict scenario. As the European conflict concern subsides, numbers and types of specialists required are changing. GME programs therefore must be reviewed as to size and specialty to ensure consistency with the revised missions of two MRCs as well as humanitarian assistance and disaster relief. It is generally accepted that GME programs enhance the quality of medical care offered at the teaching hospitals. In-house trained physicians tend to remain on active duty longer than those trained in civilian institutions. For these reasons, GME programs should be retained where they support Service missions. Program effectiveness must be optimized by ensuring in-house residency training opportunities (positions) are filled, regardless of Service branch, prior to funding sponsored residency training for military physicians in the civilian sector.

**OBJECTIVE:**

Optimize Service GME programs, ensuring they satisfy physician requirements by specialties and numbers.

**TASKS:**

- a. Size GME programs consistent with readiness and peacetime beneficiary requirements.
- b. Combine or share GME programs to ensure in-house capacity is fully used prior to sponsoring civilian training.

**PRIMARY ACTION OFFICES:**

- a. OASD(HA)
- b. The Services / OASD(HA)

# ACTION PLAN

**CATEGORY:** Manpower and Personnel

**ACTION ITEM #:** 31

**SUBJECT:** Active/Reserve Force Mix and RC Accessibility

**BACKGROUND:** The current planning models/tools will be used to determine the wartime medical manpower requirements. The Services can determine their peacetime medical requirements using Service/Joint Healthcare Management Engineering Team staffing standards.

**DISCUSSION:** Requirements to provide for wartime missions, while simultaneously maintaining peacetime beneficiary care, can only be accomplished by early accessibility to RC resources. Policy changes required to provide RC accessibility early on in any contingency are essential to ensure necessary personnel for both missions. The AC/RC force mix to perform the wartime mission should be, to the greatest extent possible, driven by the required latest arrival dates.

**OBJECTIVE:** Validate requirements and establish early authority to mobilize RC medical forces to integrate with AC immediate deployment forces.

**TASKS:**

- a. Validate requirements.
- b. Pursue early accessibility to Reserve forces.
- c. Clarify the requirement to provide beneficiary care post-mobilization within the military health service system.

**PRIMARY ACTION OFFICES:**

- a. The Services
- b. OASD(RA)
- c. OASD(HA)



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## ACTION PLAN

CATEGORY: Training

ACTION ITEM #: 32

SUBJECT: DoD Medical Readiness Training System

BACKGROUND: Shortfalls exist in medical readiness training in the Active and Reserve medical forces across the Services. Deficiencies include the lack of required initial entry training; absence of weapons qualifications, survival skills and equipment training for medical personnel. Specialty skill sustainment and progression is a critical problem for many enlisted specialists. In addition, there is limited availability of formal joint training opportunities for medical personnel.

DISCUSSION: Military medical training encompasses a broad spectrum of needs. Medical readiness training requirements must be based on the needs generated by the supported commander's operational plans. These training needs include individual clinical skills in a specific area, applying these skills in an operational setting, basic combat skills and leadership skills.

Medical readiness training includes: individual, platform/unit specific, sustainment/continuing, and leadership training. Individual skill training focuses on those techniques needed to apply clinical skills in a operational setting. Platform/unit specific skills are those collective skills that relate directly to the specific unit or platform to which the individual is assigned. Sustainment/continuing training refers to the training required to maintain or enhance the proficiency of the individual's skills. Leadership training is the training necessary to develop proficient and capable medical leaders. These training programs must be linked in a comprehensive training system to ensure medical capability when needed.

OBJECTIVE: Establish a DoD system to provide and monitor medical readiness training.

**TASKS:**

- a. Establish DoD policy guidance for medical readiness training.
- b. Evaluate the medical readiness of individuals and platforms/units and the programs available which provide medical readiness training.
- c. Identify medical readiness requirements and establish minimum medical readiness standards.
- d. Develop medical readiness training activities to achieve medical readiness standards.
- e. Develop a standard method to document training completion by individual and by operational platform/unit.
- f. Implement, evaluate and report compliance with minimum medical readiness standards.
- g. Identify commonalties in medical readiness training activities between Services and achieve efficiencies through consolidation.

**PRIMARY ACTION OFFICES:**

- a. OASD(HA)
- b. The Services
- c. OASD(HA)
- d. The Services
- e. The Services
- f. The Services
- g. Inter-Service Training Review Organization (ITRO)

## ACTION PLAN

CATEGORY: Training

ACTION ITEM #: 33

SUBJECT: Specialty Area Medical Readiness Training

BACKGROUND: ODS and recent contingency operations have highlighted an increasing need for Service personnel to rapidly adapt to a joint environment. The National Military Strategy builds on interoperability to meet future missions to include not only combined and joint operations but also peacekeeping and humanitarian missions.

DISCUSSION: Increased demand for interoperability creates new training needs within the medical system. Skilled leadership capable of integrating and synchronizing the combat health system in support of CINC defined requirements will be critical to successful joint operations. Shortfalls in specialty training areas as well as the requirement to support peacekeeping and humanitarian missions have created new training demands.

The potential for an increased number of military medical missions throughout the world suggests a need for medical personnel with regional expertise. These experts must be oriented by region to the language, culture, social norms, politics, and Host Nation medical capabilities.

During joint operations, the SIMLM system will be the primary method of conducting theater resupply across all Services. The introduction of a common medical logistics information management system will emphasize the need for a common baseline for medical logistics training within the Department. The medical logistics training strategy must include regular familiarization with the items on the DEPMEDS D-Day List, since they will be the standard in wartime, but are not necessarily used throughout the peacetime health care delivery system.

In response to the increased need for interoperability, the

medical community requires trained personnel to integrate communications planning with operations planning. The combat health system requires experienced information management specialists to participate in design, management and execution of the Command, Control, Communications, and Computers for Information Management (C<sup>4</sup>IM) architecture at all medical levels, operational and functional.

Medical personnel assigned to staff and operate burn care facilities during ODS were ill-prepared to fulfill that mission. In addition, training packages to support burn care facility expansion were not available. Personnel in forward deployed units required additional training to provide adequate preliminary burn care. Thus, the medical community must prepare personnel to manage patient care in specialty areas such as the management of burn casualties.

**OBJECTIVE:**

Develop a mechanism to ensure DoD-wide minimum competency levels for unique specialty areas.

**TASKS:**

a. Conduct a needs assessment to identify specialty area training requirements. The assessment should include at least:

- Leadership
- Regional expert training
- Communication
- Logistics
- Medical Evacuation
- Medical Planning
- Specialty areas (e.g. chemical and burn casualties).

b. Identify core competencies, tasks and skills for each area.

c. Develop training programs to accommodate Tri-Service requirements in specialty areas.

**PRIMARY ACTION OFFICE:** DoD Executive Agent - TBD

## ACTION PLAN

**CATEGORY:** Training

**ACTION ITEM #:** 34

**SUBJECT:** Utilization of Field Medical Training Sites

**BACKGROUND:** There are 12 training sites for conducting field medical training (7-Army, 1-Navy, 2-Air Force, 2-Marine). The Services usually provide Service specific training at these sites.

**DISCUSSION:** The field medical training sites provide opportunities for enhanced field training with a joint medical operations focus. Frequently, all personnel assigned to a medical unit do not participate in the training conducted at these sites. Rarely, does the training experience include other Services. Therefore, collective and joint training opportunities are not maximized.

**OBJECTIVE:** Maximize DoD-wide utilization of field medical training sites to enhance interoperability and shared training.

**TASKS:**

- a. Develop a Tri-Service medical readiness training curriculum for use at field training sites.
- b. Ensure sites provide medical readiness training to all unit personnel, i.e., medical and non-medical personnel.
- c. Ensure joint medical operations are an integral part of training.
- d. Establish a Tri-Service scheduling process to facilitate maximum utilization of the sites and to increase joint training experiences.

**PRIMARY ACTION OFFICES:**

- a. DoD Executive Agent - TBD
- b. The Services
- c. The Services
- d. DoD Executive Agent - TBD

## ACTION PLAN

Training	Training
Utilization of Field Medical Training Sites	Utilization of Field Medical Training Sites
There are 12 training sites for conducting field medical training (7-Arm, 1-Navy, 2-Air Force, 2-Marine). The services usually provide service specific training at these sites.	There are 12 training sites for conducting field medical training (7-Arm, 1-Navy, 2-Air Force, 2-Marine). The services usually provide service specific training at these sites.
The field medical training sites provide appropriate and enhanced field training with a joint medical component. Currently, 35 personnel assigned to a medical unit do not participate in the training conducted at these sites. Ideally, the training experience includes other services. Therefore, the training sites need training opportunities and resources.	The field medical training sites provide appropriate and enhanced field training with a joint medical component. Currently, 35 personnel assigned to a medical unit do not participate in the training conducted at these sites. Ideally, the training experience includes other services. Therefore, the training sites need training opportunities and resources.
Maximize DoD-wide utilization of field medical training sites to enhance medical training and service readiness.	Maximize DoD-wide utilization of field medical training sites to enhance medical training and service readiness.
Develop a Tri-Service medical readiness training curriculum for use in field training sites.	Develop a Tri-Service medical readiness training curriculum for use in field training sites.
Ensure sites provide medical readiness training to all personnel, both medical and non-medical personnel.	Ensure sites provide medical readiness training to all personnel, both medical and non-medical personnel.
Ensure joint medical readiness is an integral part of training.	Ensure joint medical readiness is an integral part of training.
Establish a Tri-Service schedule process to facilitate maximum utilization of the sites and to increase joint training experience.	Establish a Tri-Service schedule process to facilitate maximum utilization of the sites and to increase joint training experience.

DoD Executive Agent - TRD  
The Services  
The Services  
DoD Executive Agent - TRD

# ACTION PLAN

CATEGORY: Training

ACTION ITEM #: 35

SUBJECT: Training Exercises

BACKGROUND: Exercises are conducted in both the Service and joint arenas. Services conduct medical specific exercises and occasionally include medical activities in non-medical exercises. Since 1989, medical involvement in the various exercises held by the unified commands has decreased markedly. Historically, few exercises test the entire medical process from initial deployment and RC backfill to theater casualty treatment, with return to duty or transport to CONUS. The failure to include all levels of the medical system has limited the ability to assess the capability of the combat health system.

DISCUSSION: Exercises are an ideal way to test the validity of concepts, doctrine, the capabilities of both individuals and units/platforms and the soundness of OPLAN's. The failure to include medical activities in exercises prevents the operational testing of the combat medical system and its impact on force capability. The current medical exercise planning and coordination process does not adequately address or provide medical units with an opportunity to train-as-we-fight. Each Service may exercise individual medical elements but a void has developed in intra and inter Service training opportunities. Medical units must train with non-medical units and units from different Services if they are to be expected to be prepared for their wartime/contingency roles.

CONUS and OCONUS training opportunities exist, however the medical system has not maximized use of these opportunities. Comprehensive and coordinated CONUS and OCONUS medical exercises must be conducted on a regular basis to provide the opportunities for both Active and Reserve medical personnel to train with their wartime unit and, in joint exercises, to interact with other Service health care personnel within the DoD



medical community. In addition, it would test wartime specific systems to include Transportable Blood Transshipment Centers (TBTC), SIMLM, medical regulating, communications and medical evacuation. True to life medical activities and their impact on force capability must be added to wargaming simulation programs.

**OBJECTIVE:**

Increase opportunities for Active and RC medical interface in Service specific and Joint/Combined exercises.

**TASKS:**

a. Plan and program the support of, as a minimum, one major CJCS- or CINC-sponsored exercise annually. This will include the deployment of one hospital unit/element from each Military Department and the use of the Active and Reserve complement to evaluate deployment, beneficiary health care continuance, casualty expansion and casualty evacuation.

b. Assess the scope and depth of individual Service medical exercise involvement for both Active and RC, and develop procedures to increase medical involvement to the full spectrum of medical activities.

c. Plan, coordinate and execute frequent joint medical focused field exercises at the combat training centers.

**PRIMARY ACTION OFFICES:**

- a. CINCs
- b. The Services
- c. Army

## ACTION PLAN

CATEGORY: Blood

ACTION ITEM #: 36

SUBJECT: Armed Service Blood Program (ASBP)

BACKGROUND: The blood banking industry is regulated by the Food and Drug Administration (FDA) and must meet stringent quality assurance requirements. The DoD maintains FDA licenses among the three Services to have blood products available within hours of conflict to support medical treatment facilities worldwide. It is essential that the DoD maintain a well coordinated and standardized blood program, even under DoD downsizing, that is in step with new DoD health care initiatives. Limitations to date include no standardized quality assurance program nor standardized blood program computer system.

DISCUSSION: The 1992 ASBP Update Conference Panel concurred that a centralized blood program management system must exist to ensure effective use of blood resources and to meet FDA requirements. The system must be capable of providing all the required blood support services from collection to transfusion. Above all, it should be standardized among the Services to meet FDA licensure requirements and to maintain quality blood products for both peacetime health care and wartime readiness requirements. A standardized computer system is required to provide both peacetime and wartime blood program management.

OBJECTIVE: Maintain an Armed Services Blood Program which provides quality blood products and services to meet all DoD requirements.

TASKS:

- a. Provide a feasibility study to evaluate consolidation of the ASBP under one FDA license in light of DoD downsizing and new DoD and national health care initiatives.
- b. Fund, develop, and deploy the Defense Blood



# ACTION PLAN

CATEGORY: Blood

ACTION ITEM #: 37

SUBJECT: Joint Blood Doctrine

BACKGROUND: Many aspects of blood banking have changed in the last few years and there have been many changes in the way our military forces conduct contingency operations. Joint and combined doctrine is quickly evolving and has impacted on the way the ASBP must function to meet operational requirements. The ASBPO has taken action to assure joint blood doctrine is published and accessible to the field. This review of joint doctrine has pointed out some limitations which require action in order to enhance blood capabilities.

DISCUSSION: The Armed Services Blood Program Distribution System doctrine is published in Joint Pub 4-02, "Doctrine for Health Service Support in Joint Operations." Joint blood technical procedures are further specified in Joint Pub 4-02.1, "Health Service Support Logistics in Joint Operations." Additionally, proper blood usage and information on the joint blood distribution system is in the DEPMEDS Policies/Guidelines and Treatment Briefs. This blood distribution system has been in place for some time, but continues to evolve to meet new requirements and new technologies. It must also evolve to meet changing military joint and combined doctrine as well as to provide maximum use of limited resources.

OBJECTIVE: Develop joint blood doctrine to meet combatant command requirements.

TASKS:

- a. Adopt the 17 September 1992 revision of the ASBPO MBP 2004 Master Concept Plan and update medical readiness strategic plans and DEPMEDS documents.
- b. Develop a Marine Corps blood program to assist blood distribution to Marine Corps units.
- c. Review and update the mission statement of the Army

MEDLOG Battalion Blood Platoon to meet joint mission requirements.

d. Coordinate blood operations for deploying units, and blood product requirements, with the Joint Staff and ASBPO.

e. Update DoD Directive 6480.5 to reflect that Services, during contingencies, may collect blood from non-DoD civilians who come on CONUS federal or contracted facilities.

f. Allow blood donors to be drawn more frequently than every eight weeks, during contingencies, if required.

g. Ensure platelets are readily available in theater.

**PRIMARY ACTION OFFICES:**

- a. ASBPO
- b. USMC
- c. Army
- d. The Services
- e. ASBPO
- f. The Services
- g. The Services

## ACTION PLAN

CATEGORY:

Blood

ACTION ITEM #:

38

SUBJECT:

Frozen Blood

BACKGROUND:

Although the ASBP distribution system is well defined, it is limited in its capabilities to provide large amounts of liquid red cells throughout the world in a very short notice scenario. This is due in large part to the limited strategic airlift resources available, and the time it takes to increase blood collections. Also, ever changing and increasing OCONUS military missions, to include long-term peacekeeping and humanitarian assistance missions, have shown liquid red cell distribution to be expensive and wasteful. Frozen blood technology fills these gaps, but it also requires rectification of its limitations.

DISCUSSION:

The MBP 2004 determined that frozen blood should be incorporated into the military blood program to negate significant OPLAN blood shortfalls. The ASBP 1992 Update Conference Panel concurred with continuing the frozen blood program until technology provides a lighter, faster, and less manpower intensive means of blood stockpiling. However, due to the end of the cold war, the number of frozen units to be collected was reduced from 225,000 to 72,000. These units would be prepositioned in strategic locations to meet blood demands when liquid red cells were not yet available.

The 72,000 unit requirement was approved by ASD(HA), and subsequently reduced to 67,000. Currently, over 53,000 units have been produced. Blood Product Depots (BPDs) are operational in U.S. European Command, U.S. Pacific Command (PACOM) and CENTCOM to store, process and distribute frozen red cells. The Naval Blood Research Laboratory is researching extending the shelf-life of deglycerolized red cells which would tremendously aid in the distribution and use of frozen blood.

It was also agreed to continue research and development on extending the shelflife of washed frozen red cells. It was also recommended that research and development increase the output rate of the frozen blood processing system.

**OBJECTIVE:**

Complete the worldwide fielding of frozen blood to designated combatant commands, and develop improvements in frozen blood technology.

**TASKS:**

- a. Complete the deployment of 67,000 units of frozen red cell units worldwide to designated manned, equipped and supplied BPDs.
- b. Continued research and development (R&D) is needed to extend the shelflife of washed frozen red cells. R&D must increase the output rate of the frozen blood processing system.

**PRIMARY ACTION OFFICES:**

- a. The Services
- b. Army / Navy

## ACTION PLAN

CATEGORY: Blood

ACTION ITEM #: 39

SUBJECT: Operations - Peacetime

BACKGROUND: Because the ASBP must be operational during peacetime, in order for it to provide blood products at a moments notice, it has an added advantage of providing blood products for military treatment facilities for peacetime care. Blood system personnel are trained for their wartime mission by performing their peacetime duties. New FDA regulations and the Clinical Laboratory Improvement Program (CLIP) regulations [created as a result of the Clinical Laboratory Improvement Act (CLIA '88)] impact on this military blood program. Many changes must be incorporated in the system to meet these new requirements. Therefore, Blood Donor Centers (BDCs) and transfusion services must continue to improve training and quality assurance. Also, the Services should provide the same types of equipment and services in peacetime that medical laboratory technicians will use during wartime. Currently, peacetime blood operations do not utilize frozen blood in an adequate amount to keep personnel proficient in frozen blood techniques for contingencies. Also, the system does not use ADSOL<sup>®</sup> as an additive to extend 35-day shelflife red cell units to 42-day shelflife. Other additives may be available in the near future which could extend red cell unit shelflife to over 8 weeks.

DISCUSSION: The new FDA and CLIA '88 quality assurance guidelines and regulations have forced BDCs and transfusion services to rethink the way they do business. The Services' Blood Program Officers have taken steps to meet these requirements and the ASBPO will monitor their plans and improvements in order to keep the ASD(HA) informed of medical readiness within the blood program. Also, frozen blood should be included in the Services' major medical treatment facilities as a useful blood product alternative. The ASBP should also



continue to recommend continued R&D in extending the shelflife of red cells to better utilize this scarce product in both peace and war.

**OBJECTIVE:**

Develop and maintain peacetime blood operations which support the continuum of operations.

**TASKS:**

a. Implement use of frozen red blood cells in most CONUS and OCONUS MTFs to manage frozen red cell inventories and to maintain training for wartime readiness.

b. License all ASBP (CONUS and OCONUS) BDCs with the FDA.

c. Adopt the use of the additive solution bag use for stockage and use for CONUS blood donor collections.

d. Provide plans and implement quality assurance procedures to meet FDA and CLIA '88 regulations and guidelines.

**PRIMARY ACTION OFFICES:**

- a. The Services
- b. The Services
- c. ASBPO / The Services
- d. The Services

## ACTION PLAN

CATEGORY: Blood

ACTION ITEM #: 40

SUBJECT: Operations - Wartime

BACKGROUND: The main purpose of the ASBP is to maintain the ability to provide the combatant commands the right types of blood products at the right place, right time, and in the right amounts. This ability requires continuous improvements. Changes in the way the DoD handles contingencies also impacts on this capability. Current capabilities are limited by poor communications capabilities, inadequate manning and supplying of BPDs, inadequate platelet collection and/or distribution capability, and frozen blood technology shortfalls. Improvements are also needed in the blood distribution system to include a new Armed Services Whole Blood Processing Laboratory (ASWBPL) to meet PACOM requirements, and a requirement for a transportable blood transshipment center. Also, blood planning factors, Service blood requirements/capabilities, and the impact of females in combat units should be studied.

DISCUSSION: Blood is one of the pillars of medical care. The ASBP, during wartime, begins at the BDC and ends at the transfusion of the patient at the MTF in the field. Every aspect of this program must be monitored in order to make it work efficiently. Operations DESERT SHIELD, DESERT STORM, and RESTORE HOPE have provided lessons which the ASBPO uses for continued improvement. These issues are complex, and their review and completion must be coordinated through many organizations.

OBJECTIVE: Comprehensively update wartime blood requirements and develop programs, doctrine, policies and procedures to ensure implementation.

TASKS:

- a. Ensure that deglycerolization teams are relocated closer to the BPDs in peace time, to meet the demands of the first seven to ten days of any contingency.

- b. Complete all planned BPD projects.
- c. Relocate ASWBPLs to planned major TRANSCOM air hubs, complete the ASWBPL at Travis Air Force Base, and staff it in both peacetime and contingencies.
- d. Scale down the development of the frozen portion of the TBTC to meet faster deployment and to reduce airlift requirements.
- e. Redistribute the share of contingency theater blood requirements equally among the Services.
- f. Provide study on the ability to provide group 'O' blood to the 2<sup>nd</sup> echelon of care and the impact of women in combat units on the use of Rh negative blood.
- g. Establish and improve a means to provide platelets in a field environment.
- h. Field the single solution version of Resuscitative Fluids Production System (REFLUPS) for use in conjunction with Navy and Army blood program missions.
- i. Continue to enhance communications capabilities to meet blood program needs and declassify blood program operational information to the maximum extent possible.
- j. Ensure accuracy of blood groups on identification tags/cards.
- k. Maintain the current blood planning factors.

**PRIMARY ACTION OFFICES:**

- |                |                      |
|----------------|----------------------|
| a., b., i., j. | The Services / CINCs |
| c. & d.        | USAF                 |
| e., f., k.     | ASBPO                |
| g.             | The Services         |
| h.             | Army / Navy          |

## ACTION PLAN

CATEGORY: Blood

ACTION ITEM #: 41

SUBJECT: Research and Development

BACKGROUND: The ASBP continues to strive for and provide the best and safest blood products available to meet medical readiness requirements and peacetime health care needs. Areas of the blood program which need improvement from a research and development aspect include, but are not limited to:

- a longer liquid red blood cell shelflife to reduce wastage and allow better blood management;
- rapid field test kits to test blood donors for emergency field collections;
- virus-free blood products or blood substitutes;
- an extended shelflife of washed frozen red cells;
- better field platelet collection capabilities as well as a platelet shelflife extension.

The ASBPO must continue to work hand-in-hand with the Services' blood research and development community to make sure these requirements receive priority.

DISCUSSION: Since WWII the military has been at the forefront in blood research and development. The military provided the first anticoagulant to allow blood to remain viable outside the body. The use of plastics instead of glass bottles by the military has revolutionized the world's blood banking capabilities. Military blood requirements and military blood R&D have always been a lightning rod for civilian blood research and development as well. Today, blood R&D is concentrating on extending the shelflife of red blood cells in order to alleviate critical blood shortages. New platelet R&D may extend platelet

shelflife and provide a better means to collect platelets in a field environment. Automation of equipment may allow extending the shelflife of washed frozen red cells. Above all, R&D is researching how to make blood and blood products safe from diseases which may be transmitted by blood. Because this is very difficult, blood substitutes research is still ongoing. The ASBP drives military R&D efforts to fulfill shortfalls in blood capabilities. The ASBP continues to monitor and assist military and civilian blood research in order to make the military's blood program safe and efficient, and to serve as a catalyst for continued emphasis on this research.

**OBJECTIVE:**

Monitor and assist blood and blood substitute research and development; incorporate new technologies as they become available.

**TASKS:**

- a. Continue support of the above R&D efforts to extend liquid red cell shelflife.
- b. Continue blood and blood research in the military and monitor the United States' and other countries' civilian blood and blood substitute research.

**PRIMARY ACTION OFFICES:**

- a. ASBPO / The Services
- b. ASBPO

# ACTION PLAN

CATEGORY: Readiness Oversight

ACTION ITEM #: 42

SUBJECT: Medical Readiness Oversight

BACKGROUND: DoD has many organizations and activities responsible for various elements of medical readiness. True capability can not be evaluated without considering all of the elements as a whole.

DISCUSSION: Medical readiness is a complex combination of elements and activities that cross many functional areas, such as logistics, training, planning, and personnel. Each area has unique requirements and readiness shortfalls which must be continually assessed. In addition, there is significant overlap which must be recognized to clearly assess the medical readiness status of individuals, units, and platforms.

An organization with responsibility for central oversight of all aspects of medical readiness is required. In addition, each major area, which as a minimum includes the MRSP functional areas, must have a group responsible for monitoring that area of medical readiness and reporting to the central organization. The central organization will include OSD, Joint Staff and Service medical and non-medical representatives, to ensure that medical readiness is in concert with other programs throughout DoD.

OBJECTIVE: Establish DoD process to monitor medical readiness.

- TASKS:
- a. Review current groups, committees, councils and activities. Evaluate their charter, roles and responsibilities for medical readiness.
  - b. Eliminate duplication and consolidate functions; develop and implement a Defense Medical Readiness Committee (DMRC) to comprehensively monitor the overall status of DoD medical readiness.

- c. Develop mission, membership and functions of oversight organization consistent with Medical Readiness Strategic Plan.

PRIMARY ACTION OFFICES: OASD(HA) / OD(PA&E)

## Appendix B

### PRIMARY ACTION OFFICE - SUMMARY

PRIMARY ACTION OFFICES	STRATEGIC ACTION PLAN #
Office of the Under Secretary of Defense (Personnel and Readiness)	27, 28
Office of the Assistant Secretary of Defense (Health Affairs)	1, 3, 5, 8, 10, 17, 23, 26, 28, 30, 31, 32, 42
Office of the Assistant Secretary of Defense (Reserve Affairs)	18, 27, 31
Office of the Director, Program, Analysis and Evaluation	9, 42
The Joint Staff	1, 2, 4, 5, 6, 7, 10, 11, 12, 14, 15, 16, 17, 18, 21, 22, 23, 24, 26, 28
The Unified Commands	16, 17, 26, 35, 40
The Services	1, 2, 3, 4, 5, 6, 7, 13, 14, 15, 16, 17, 18, 19, 22, 25, 27, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41
Army - specific	14, 24, 35, 37, 38, 40
Navy - specific	15, 24, 38, 40
Air Force - specific	24, 25, 40
Marine Corps - specific	24, 37
USACOM - specific	1, 20, 26
USTRANSCOM - specific	17, 20, 22, 23, 25
Defense Logistics Agency	14, 15, 16, 17
Defense Information Systems Agency	11, 26



<b>PRIMARY ACTION OFFICES</b>	<b>STRATEGIC ACTION PLAN #</b>
Defense Medical Systems Support Center, OASD(HA)	16
Medical Functional Integration Management, OASD(HA)	12, 13, 16, 36
Defense Modeling and Simulation Office	7, 10
Armed Services Blood Program Office	36, 37, 39, 40, 41
Inter-Service Training Review Organization	32
Joint Medical Readiness Training Center	2
DoD Executive Agent - TBD	33, 34

## Appendix C

### REFERENCES

1. Department of Defense Medical Readiness Strategic Plan, February 1988
2. OASD(HA) Memorandum, Subject: FY96-01 Defense Health Program (DHP) Program Objective Memorandum (POM) Preparation Instructions, 2 March 1994
3. Department of Defense Inspector General Report: DoD Medical Mobilization Planning & Execution, 93-INS-13, September 30, 1993
4. Department of Defense Inspector General Report: Medical Requirements Determination Process, 93-INS-12, September 30, 1993
5. General Accounting Office Report: INDIVIDUAL READY RESERVE - Army Needs to Make More Effective Use of Limited Training Funds, GAO/NSIAD-90-55, Feb 1990
6. General Accounting Office Report: DOD MEDICAL INVENTORY, Reductions Can be Made Through the Use of Commercial Practices, GAO/NSIAD-92-58, Dec 1991
7. General Accounting Office Report: OPERATION DESERT STORM - War Highlights Need to Address Problem of Nondeployable Personnel, GAO/NSIAD-92-208, August 1992
8. General Accounting Office Report: OPERATION DESERT STORM - Full Army Medical Capability Not Achieved, GAO/NSIAD-92-175, August 1992
9. General Accounting Office Report: MEDICAL READINESS TRAINING - Limited Participation by Army Medical Personnel, GAO/NSIAD-93-205, June 1993
10. General Accounting Office Report: OPERATION DESERT STORM - Improvements Required in the Navy's Wartime Medical Care Program, GAO/NSIAD-93-189, July 1993
11. General Accounting Office Report: OPERATION DESERT STORM - Army Medical Supply Issues, GAO/NSIAD-93-206, August 1993
12. General Accounting Office Report: OPERATION DESERT STORM - Problems with Air Force Medical Readiness, GAO/NSIAD-94-58, December 1993
13. General Accounting Office Testimony: HEALTH CARE - Readiness of U.S. Contingency Hospital Systems to Treat War Casualties, GAO/T-HRD-92-17, March 25, 1992

14. Naval Audit Service Report: Management of Medical and Dental Supplies in Support of the Fleet Marine Force, NAVAUDSVC P-7520.1, 16 November 1993
15. MAXIMUS Final Report: "Medical Enlisted Sustainment Training in the Reserve Components," Contract MDA 903-89-C-0275, November 30, 1990
16. MAXIMUS Final Report: "Analysis of Wartime Medical Skills Training in the Armed Services," Contract MDA 903-87-C-0813, September 30, 1988
17. Panel Report, Armed Services Blood Program Update Conference, Volumes I and II, 14-18 September 1992.
18. OASD(HA) Memorandum, Subject: Armed Services Blood Program Update Conference Final Recommendations, 14 May 1993.
19. Report on the DoD Bottom-up Review, Secretary of Defense, October 1993.
20. National Security Strategy of the United States, the White House.
21. National Military Strategy, Chairman, Joint Chiefs of Staff, January 1992.
22. The Economics of Sizing the Military Medical Establishment: Executive Report of the Comprehensive Study of the Military Medical Care System, April 1994.
23. Wartime Medical Requirements to the Comprehensive Study of the Military Medical Care System, September 21, 1994.
24. Report on Other Medical Issues, April 1994.
25. RAND Report: The Demand for Military Health Care, January 1994.
26. IDA Report: Cost Analysis of the Military Medical Care System: Data Cost Functions and Peacetime Care, January 1994.
27. IDA Report: Analysis of the 1992 Department of Defense Survey of Military Medical Care Beneficiaries, January 1994.
28. Joint Publication 4-02, Doctrine for Health Service Support in Joint Operations
29. Joint Publication 4-02.1, Health Service Support Logistics in Joint Operations (final draft)

## Appendix D

### ABBREVIATIONS and ACRONYMS

<b>AC</b>	- Active Component
<b>ADAL</b>	- Authorized Dental Allowance List
<b>AE</b>	- aeromedical evacuation
<b>AFHPSP</b>	- Armed Forces Health Professions Scholarship Program
<b>AMAL</b>	- Authorized Medical Allowance List
<b>AMC</b>	- Air Mobility Command
<b>APOD</b>	- aerial port of debarkation
<b>APOE</b>	- aerial port of embarkation
<b>ASBP</b>	- Armed Services Blood Program
<b>ASBPO</b>	- Armed Services Blood Program Office
<b>ASD(C<sup>3</sup>I)</b>	- The Assistant Secretary of Defense (Command, Control, Communications, and Intelligence)
<b>ASD(HA)</b>	- The Assistant Secretary of Defense (Health Affairs)
<b>ASWBPL</b>	- Armed Services Whole Blood Processing Laboratory
<b>BDC</b>	- blood donor center
<b>BPD</b>	- blood product depots
<b>C<sup>2</sup></b>	- command and control
<b>C4</b>	- Combat Casualty Care Course
<b>C<sup>3</sup>I</b>	- command, control, communications, and intelligence
<b>C<sup>4</sup>ITW</b>	- Command, Control, Communications, Computers, and Intelligence for the Warrior
<b>C<sup>4</sup>IM</b>	- Command, Control, Communications, Computers for Information Management
<b>CDE</b>	- common desktop environment
<b>CENTCOM</b>	- US Central Command
<b>CHCS</b>	- Composite Health Care System
<b>CIL</b>	- Critical Item List
<b>CIM</b>	- Corporate Information Management
<b>CINC</b>	- commander in chief (of a unified or specified command)
<b>CJSC</b>	- Chairman, Joint Chiefs of Staff
<b>CLIA</b>	- Clinical Laboratory Improvement Act
<b>CLIP</b>	- Clinical Laboratory Improvement Program
<b>COMMZ</b>	- communications zone
<b>CONOPS</b>	- concept of operations
<b>CONUS</b>	- continental United States
<b>COSE</b>	- common open systems environment
<b>CRAF</b>	- Civil Reserve Air Fleet
<b>CRTS</b>	- Casualty Receiving and Treatment Ship
<b>CZ</b>	- combat zone

<b>DAAS</b>	- Defense Automated Addressing System
<b>DAASO</b>	- Defense Automated Addressing System Office
<b>DAMES</b>	- DAASO Automated Message Exchange System
<b>DART</b>	- Dynamic Analysis and Replanning Tools
<b>DBPA</b>	- Decentralized Blanket Purchase Agreements
<b>DEPMEDS</b>	- Deployable Medical Systems
<b>DEPSECDEF</b>	- Deputy Secretary of Defense
<b>DDN</b>	- Defense Data Network
<b>DISA</b>	- Defense Information Systems Agency
<b>DLA</b>	- Defense Logistics Agency
<b>DMAC</b>	- Defense Medical Advisory Council
<b>DMLSS</b>	- Defense Medical Logistics Standard System
<b>DMPG</b>	- Defense Medical Programming Guidance
<b>DMRC</b>	- Defense Medical Readiness Committee
<b>DMSB</b>	- Defense Medical Standardization Board
<b>DMSO</b>	- Defense Modeling and Simulation Office
<b>DMSSC</b>	- Defense Medical System Support Center
<b>DNBI</b>	- disease and nonbattle injury
<b>DoDIG</b>	- Department of Defense Inspector General
<b>DPG</b>	- Defense Planning Guidance
<b>DPSC</b>	- Defense Personnel Support Center
<b>DVA</b>	- Department of Veterans Affairs
<b>EUCOM</b>	- US European Command
<b>EXPLAN</b>	- exercise plan
<b>FAP</b>	- Financial Assistance Program
<b>FDA</b>	- Food and Drug Administration
<b>GAO</b>	- General Accounting Office
<b>GCCS</b>	- Global Command and Control System
<b>GME</b>	- Graduate Medical Education
<b>HSS</b>	- health service support
<b>ICD-9</b>	- International Classification of Diseases (of the World Health Organization), 9th Revision
<b>ICMOP</b>	- Integrated CONUS Medical Operations Plan
<b>IMRAS</b>	- Individual Mobilization and Replacement Assessment System
<b>INMARSAT</b>	- International Maritime Satellite
<b>IPP</b>	- industrial preparedness planning
<b>IPS</b>	- Illustrative Planning Scenario
<b>IRM</b>	- information resource management
<b>ISS</b>	- information support systems
<b>ITRO</b>	- Inter-Service Training Review Organization
<b>ITV</b>	- in-transit visibility
<b>JCEWG</b>	- Joint Casualty Evacuation Working Group (of USTRANSCOM)

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<b>JCS</b>	- Joint Chiefs of Staff
<b>JMREC</b>	- Joint Medical Readiness Education Council
<b>JMPC</b>	- Joint Medical Planners Course
<b>JMPE</b>	- Joint Military Professional Education
<b>JMRTC</b>	- Joint Medical Readiness Training Center
<b>JOPEs</b>	- Joint Operations Planning and Execution System
<b>JOPS</b>	- Joint Operation Planning System
<b>JSCP</b>	- Joint Strategic Capabilities Plan
<b>J-TAG</b>	- JMREC Training Advisory Group
<b>JTF</b>	- joint task force
<b>JTTP</b>	- joint tactics, techniques, and procedures
<b>JULLS</b>	- Joint Uniform Lessons Learned System
<b>MAISRC</b>	- Major Automated Information System Review Council
<b>MARC</b>	- Multi-technology Automated Reader Card
<b>MASTER</b>	- Medical Assessment Sustainment Training and Execution Requirements
<b>MBP</b>	- Military Blood Program (2004)
<b>MEDCAT-X</b>	- Medical Catalog - Expanded
<b>MEDEVAC</b>	- medical evacuation
<b>MEPES</b>	- Medical Planning Execution System
<b>MEDLOG</b>	- medical logistics (battalion)
<b>MFIM</b>	- Medical Functional Integration Management
<b>MHSS</b>	- Military Health Services System
<b>MLPS</b>	- Medical Logistics Proponent Subcommittee ( of the Medical Functional Steering Committee)
<b>MPM</b>	- Medical Planning Module (of JOPEs)
<b>MRC</b>	- major regional contingency/conflict
<b>MRSP</b>	- Medical Readiness Strategic Plan
<b>MTF</b>	- medical treatment facility
<b>NDMS</b>	- National Disaster Medical System
<b>NEO</b>	- noncombatant evacuation operations
<b>NPG</b>	- non-unit personnel generator
<b>NSN</b>	- national stock number
<b>OASD(HA)</b>	- Office of the Assistant Secretary of Defense (Health Affairs)
<b>OASD(RA)</b>	- Office of the Assistant Secretary of Defense (Reserve Affairs)
<b>OCONUS</b>	- outside continental United States
<b>OD(PA&amp;E)</b>	- Director (Program Analysis and Evaluation), OSD
<b>ODS</b>	- Operations DESERT SHIELD/DESERT STORM
<b>OOTW</b>	- operations other than war
<b>OPLAN</b>	- operation plan
<b>OPSEC</b>	- operations security
<b>OPZONE</b>	- operational zone
<b>OUSDP(P&amp;R)</b>	- Office of the Under Secretary of Defense (Personnel and Readiness)

<b>PACOM</b>	- U.S. Pacific Command
<b>PAR</b>	- population at risk
<b>PC</b>	- patient conditions
<b>PEP</b>	- DoD Personnel Exchange Program
<b>PLG</b>	- Personnel Loss Generator (in MEPES)
<b>PM</b>	- preventive medicine
<b>PMI</b>	- patient movement items
<b>POM</b>	- program objective memorandum
<b>PPBS</b>	- Planning, Programming, and Budgeting System
<b>QSTARS-MS<sup>2</sup></b>	- Quad Service Satellite Transmission and Receiving System - Medical Supply Support
<b>RC</b>	- Reserve Component
<b>R&amp;D</b>	- research and development
<b>REFLUPS</b>	- Resuscitative fluids production system
<b>SALTS</b>	- Streamlined Alternative Logistics Transmission System
<b>SATCOM</b>	- satellite communication(s)
<b>SECDEF</b>	- Secretary of Defense
<b>SIMLM</b>	- Single Integrated Medical Logistics Management
<b>SKO</b>	- sets, kits, and outfits
<b>SORTS</b>	- Status of Resources and Training System
<b>SWA</b>	- Southwest Asia
<b>TA</b>	- table of allowance
<b>TAPP</b>	- Total Army Personnel Proponency (study)
<b>TBTC</b>	- transportable blood transshipment center
<b>TMIS</b>	- Theater Medical Information System
<b>TMMMC</b>	- theater medical material management center (Army)
<b>TOE</b>	- table of organization and equipment
<b>TPFDD</b>	- Time Phased Force Deployment Data
<b>TPMRC</b>	- theater patient movement requirements center
<b>TRAC<sup>2</sup>ES</b>	- TRANSCOM Regulating and Command & Control Evacuation System
<b>TRANSCOM</b>	- U.S. Transportation Command
<b>UA</b>	- unit assemblage
<b>UN</b>	- United Nations
<b>USACOM</b>	- U.S. Atlantic Command
<b>USD/P</b>	- Under Secretary of Defense for Policy
<b>USPACOM</b>	- U.S. Pacific Command
<b>WAM</b>	- WWMCCS ADP Modernization
<b>WIA</b>	- wounded in action
<b>WR</b>	- war reserve
<b>WWMCCS</b>	- Worldwide Military Command and Control System





